The Builder.

No. CCCCI.

SATURDAY, OCTOBER 12, 1850.

THOSE who alarm may be expected to re-assure, when the danger is over. In our paper of the 28th ult. we inserted four-and-twenty lines from a correspondent, directing attention to the fact, that instead of continued iron palisades in front of the new British Museum, as originally intended, a high stone wall was to be erected at each end of the enclosure in Great Russell-street, extending some yards beyond the residences which are unluckily tacked on to the structure. Our contemporaries of the daily press reprinted and commented on the letter; our powerful and ready ally, *The Times*, in particular, brought its broadside to bear on the proposed change; and the result, we are glad now to be able to state, is, that the walls are given up, and that the original plan will be reverted to. We need scarcely say that we heartily congratulate the public and the trustees on the determination of this question. The wall would have been a great eyesore, especially at the Montague-street corner, and would have blocked up the place most unnecessarily and injuriously.

The public, or rather their representatives, should take warning from this occurrence, and insist, with regard to public buildings and works, in which their honour, convenience, and instruction are concerned, and for which they find the money, on knowing exactly what is going to be done before the works are commenced. Had this been done in the case of the Museum itself, that building, stately and noble as it will be when completed, would have been very different in character and arrangement,—much more convenient and spacious, and much less costly, as compared with commodiousness and extent. The public have a *right* to be informed on such matters. The haughty reserve and mystification of officials is most improper and injurious, and ought not to be permitted: they should be quietly informed, and made to understand it too, that they are the servants of the public, the dispensers of the public money, the guardians of the public honour, and, not merely have no right to pooh-pooh and disregard those who have placed them in that position, *but shall not be allowed to do so.* The sooner this understanding is arrived at the better for all parties. What the duty and policy of the public, on their side, is, in respect of national works, we told them not long ago.

But we would return to the subject that led to this observation, in order to remove a misconception which prevails. Our correspondent, in the letter referred to, ascribed the proposal to erect the walls to an objection on the part of the gentlemen residing in the wings, to the publicity which an iron railing would give to their dwellings, and the officers of the Museum have, in consequence, been much abused by writers in the daily papers. Now that one or two of the officers of that establishment would treat with very little attention the opinion of the public, as compared with their own comfort, and have a very wrong notion of their position, we are not disposed to deny. An officer who, putting his hands into his pockets and bridling up, could say, as one did say, to a very respectable foreign architect who, armed with the name of another of the officers of different mould, had found his way into the Gallery of Antiquities one Saturday,—"Sir, we will not allow *any one* to run about *our* house on a Saturday,"—will be none the worse for some gentle reminders of his real position, and a hint which may regulate his future bearing. But in the present case, we learn that the officers of the Museum had nothing whatever to do with the proposition; and it is not fair, therefore, that they should bear the blame.

The proposition emanated solely from the architect, Mr. Sidney Smirke, and was prompted partly by desire to get over what he considered a difficulty in the shape of the front ground at the west end (next the houses in Great Russell-street), and to mask what is certainly a very ugly part of the building. He was also regulated by the stipulated position of four pedestals in the line of the enclosure, which are to receive statues. It was simply a question of judgment; and the trustees yielded to views, which both the architect and they have now withdrawn on reconsideration.

The statues to be set up will be of Newton, Shakspeare, Milton, and Bacon: models have already been made for them by Sir Richard Westmacott, who, it seems, whether justly or not, considering how few opportunities the sculptor has in England, is to execute them all. The pedestals are in hand.

A portion of the sculpture for the tympanum of the pediment is now on the premises. This is also by Sir Richard Westmacott, and represents the progress of man from a time when, wild in woods, the native savage ran, up to the highest state of intellectual advancement. The part already there is executed in a broad, bold style, in Portland stone, and promises to be effective in its place. This sculpture, the antefixæ, and the intended groups at foot of the central portico, may be expected to give what the edifice at present very much wants externally,—life and movement.

A WORD ON THE TREATMENT OF THE WINDOW IN ANGLO-CLASSIC DESIGN.*

The office or function of the window is not a more important one in the pointed style than it is in the classic: it has as strong a claim to consideration and character in the one as in the other, and therefore no good and sufficient reason can be assigned why, while the jambs of the Gothic window enshrine a labyrinth of beauty and intricacy of decoration, the filling up of the classic window should be entirely neglected in the way of design. I say neglected, but it seems worse than neglected: not only have imagination, taste, artistic feeling, had no part in the design, but it is positively marred by the sash in common use. The straight sash bars, dividing it into a series of equal squares, do not improve the appearance of the humblest cottage, but in an architectural composition they are an injury: sash bars appear as decided lines, more harsh and cutting than the design elsewhere exhibits. Around, the lines are the boundaries of superficies, but here they harshly cut up and separate. In short, in most instances a spectator, ignorant of the custom, would be led to conclude that the architect had abandoned this portion of the façade to the joiner, who had filled it up in the cheapest manner he could. In Gothic art the window tracery is one of the most important features: it was made either a part of the system of the wall tracery even of the richest interiors, or it became the prime object, and sometimes the sole object, of decoration, which was concentrated upon it. What, therefore, would be the appearance of the great cathedrals and other buildings, either from within or without, if their windows, with their storied panes, their stained glass, their perforated heads, were taken out?

This is, indeed, a strange anomaly in our Anglo-classic pile: the resources of decoration have been lavished on the frame, not on the picture. The architect has elsewhere, perhaps, seized every opportunity to exhibit luxuriance of imagination, purity of taste, and refinement of feeling; but within the jambs of the window neither mind nor feeling have entered. Straight parallel lines are oft-times deemed too rude in the slating of a lodge. We must have fancy slating, geometrical graces of form, in our roofs, while the most important feature of the front is slighted.

But the window has to do with more than the exterior decoration: it is seen on both sides: it is a feature of the interior as well as of the exterior,—the link connecting them,—the part from which Imagination weaves her web of conjecture regarding the interior. If any sacrifice, therefore, be made to beauty, it should be here; and to the window should be given a tone corresponding to the supposed elegance and refinement within. I know that the spirit and character of the classic architecture must be borne in mind, but design might be introduced into a classic window without doing violence to either. Its appearance from within is as little to be disregarded as its aspect from without. What avails the elaborate floorcloth and ceiling of the drawing-room, the pictorial embellishment of the walls, panelled and gilded decorations, while the window is plainness—nay, ugliness—itself?

I have above contrasted our common sliding sash with pointed windows only; but not only ecclesiastical architecture, but the domestic Tudor, Elizabethan, and other styles, on this point reprove us. The bays and oriels, mullions and casements, of our old mansions are in harmony with the rest of the design. Compare our present windows with those of Venice, with those of the old Venetian houses of the chief cities of the Ionian Isles, and the palaced streets of Valetta! The lower windows of our ancient street architecture were many of them gems of artistic taste! Many beautiful specimens yet remaining of the old timber buildings, erected centuries ago, show what careful objects of design were the windows: divided by mullions into elegantly proportioned lights, with fanciful heads, they are invariably the most agreeable objects in the design, and might make us blush for our present practice—a practice than which anything more unarchitectural or ungeometrical it would be difficult to imagine. No division could be less artistic than these sashes. There is nothing more barbarous in any Romanesque style, however infantine; and nothing but æsthetic blindness, added to exaggerated notions of their utility, could have procured their toleration.

I admit that they possess some advantages: they may be made completely weather-proof, and do not soon get out of order; but their unsightliness is too great; and no architect of genuine feeling for the beautiful, if left to himself, would, even in a private dwelling, make use of them. With the vertically sliding arrangement I necessarily associate the ordinary division into equal squares; for the unsightly overhanging of the upper sheet, and the exposure of cord and pulleys, render the window unworthy the expense of any geometrical or fanciful division of each sash.

But there is no real difficulty in a reformation on this head. We are not indissolubly wedded to the practice. Excellent substitutes might be devised. French casement sashes in buildings of a domestic character are as tasteful as the others are tasteless: they are eminently harmonious with classic architecture, and are a good receptacle for plate-glass. In general, I know they are not made water-tight in England, and this circumstance is used as a ground of objection to them; but they *can* be made perfectly impervious to the weather, and have been so made in England as well as in France. I know of no serious objection to this plan. No matter what the size or proportion of the window opening, it can be so divided, both ways, by mullions and transoms, as to have the casements of a proper size, or sufficiently small to open without inconvenience; whereas in sliding windows, if short, the sheets run badly, and get out of order. Besides this,

* See p. 471, *ante*,

French casements, when opening, as they should and may do, inwards, are more easily cleaned than the sliding sashes, and possess the additional and well-known advantage of affording egress on to a balcony or lawn.

But there are buildings where arrangements for opening are not called for. Public edifices generally require only a small upper casement for ventilation, and in such there is greater scope for ornamental design in the division into panes,—a scope, indeed, that seems infinite. Nature suggests innumerable ideas and images, forms and combinations of forms, that could be worked up and introduced in perfect harmony with the style. There are geometrical designs in pointed buildings that would be equally applicable to the horizontal or classic. Whereas the cross-barred, wooden grating now in use would be a discordancy in any style. Without wishing to encroach upon Gothic design, I would ask, why should not the classic sash in public buildings,—our halls, galleries, churches, palaces,—have lines in all respects as agreeable to the eye as the cathedral window? Why should it exhibit such a paucity, such a dearth of design, imagination, and taste? Why should not geometry and nature be called in here as well as in Gothic Arabian, &c.? and why not seek our types also among the flowers of the field? How beautiful are some Arabian and Persian windows—the latticed casement of "cool kiosk and bower!" To the Gothic cathedral, the mid-day sun has "streamed through emeralds and topazes, dazzling the sight, tinting sombre crocket and pier with rainbow hues." And glass staining and painting, from the simplest bordering to the highest pictorial embellishment and illustration, is as applicable to the classic window as to the Gothic. It must be used, however, in a manner agreeable to the spirit of the day, and made to appeal to and gratify the judgment as well as the imagination. In reply to the various questions just started, the increase of expense could not be consistently urged, for such a consideration is as applicable to the Gothic as to the classic, and to other parts of the latter as to the window. Economy should not operate to the decoration of minor parts, and the neglect of the major ones. But economy has less to do with public than with private buildings, and it is at the former my remarks are chiefly aimed. Liberality is expedient in a public building, which should, at whatever cost, faithfully represent the institution to which it is devoted, and impress by analogy its image on the mind.

Our present mode, among other disadvantages, too much restricts us to certain proportions of window: I mean proportion of length to breadth. In short windows the sashes slide badly, and get out of order. Besides, large windows, as broad as high, or broader, look ungraceful. In the Tudor style the division, by mullions, into lights, more or less in number according to the width, gives more latitude in the general proportion, or renders almost any proportion pleasing; and in this it has a great advantage over the present system. In truth, many hints for improvement in our windows might be taken from Gothic buildings, both ecclesiastical and domestic. Of the grouping of windows they furnish us with excellent examples, from the early lancet window to the many lights of the Tudor style.

Attention to the due ornamentation of the window would render us more independent of columnar decoration in the general design of the edifice. A row of handsome windows, with appropriate dressings, would have a powerful effect of themselves, and give due character to the building, without any non-essential or adopted features; while more irregularity might, when requisite or useful, be admitted into the design: the window, for instance, might be placed with greater eye to convenience, provided we made it in itself an ornamental object. And further, windows would be handsome and effective objects independent of the dressings: at least, a very slight moulding would be all that, in ordinary cases, was absolutely necessary.

It is, perhaps, in the nature of things that picturesque beauty should, in some degree, fade before those scientific discoveries, mechanical inventions, and improvements which add to the accommodation and comfort of life. It does so probably by an operation of the law of compensation: "for every thing you gain you lose something, and for every thing you have missed you have gained something else;" and such, I consider, has been the case in reference to plate-glass. One square in a window, or a series of large squares, looks chaste and elegant, and is appropriate to some designs; but generally it is not equal, in pictorial qualities, to some older methods, as every artist knows. I do not say that we should not avail ourselves of the discoveries and improvements of science: plate-glass may be, and is, very extensively used amongst us, even in Gothic and Elizabethan architecture; and we should gratefully receive from the hand of science what new material will contribute to the convenience and pleasure of our abodes; but amid the changing requirements of habit and usage, and their supply, we should not lose sight of the eternal principles of beauty. Beauty is also a want of our nature, and a regard for it should in some measure qualify, or at least modify, our use of new inventions. Many artists (by which I mean painters and sculptors) and other votaries of the abstractly beautiful, look, I believe, with a somewhat jealous eye on the present extensive use of plate-glass, and rather regret the disappearance of the old lead lights. And certainly whatever advantages the former possesses, the latter, it cannot be denied, were more picturesque. The architect differs from the painter, in respect of taste, chiefly by his having a greater regard for the useful, which the artist is too apt to lose sight of in judging of architectural works; but the architect should nevertheless have as strong a feeling for the beautiful as any other follower of the goddess, and he should secure the useful with as little sacrifice of beauty as possible.

Let us consider for a moment the respective claims of the old and of the present practice to our notice. Besides the minuteness of division, contributing, by means of contrast, to greatness of effect in the surrounding parts, the filling in of the old diamond panes was like adding an enrichment to the building: like tracery or tabernacle work, and their varied angles of reflection, it secured a play of light and shade, and produced a sparkling in the rays of heaven, a rebeaming of sun and sky, that might rival the surface of the glassy lake itself. I have seen effects on old lead lights in Italian churches, for which the elegance of plate-glass is but an indifferent substitute.

In the present method, on the contrary, the window opening is merely filled in with a rude cross-barred wooden grating, by which it is divided into squares of conspicuous dimensions, and made to exhibit nothing but equal panes of glass and harsh parallel lines. Now, parallel lines are pleasing enough where, by means of the perspective, their distances appear to diminish, and the lines themselves to converge as in rustication, but in windows they are too short for this effect. When their distance is so small that the whole at a proper point of view would look like network or texture, these horizontal and perpendicular lines may also be tolerated; but on a large scale they have a bad effect, and must ever present in themselves a rude and commonplace appearance, inferior to that of almost every other arrangement. But the great objection is, that, in such division of a window, no mind, no artistic feeling, nor design, is manifested,—no law of beauty is recognised,—and the window is consequently cut off from all participation in the general character of the building, and has no relation to other parts of the design.

The practice I believe, however, originated, not so much in a narrow view of architecture, which should combine beauty with usefulness, as from a mistaken idea of beauty, for which, with some, simplicity is a synonyme. Now, simplicity is but an ingredient, and a subordinate one, of beauty. Many are the qualities that go to make up the beautiful: there must be a due subordination of parts,—gradation, contrast, variety,—intricacy, even, is a quality of beauty. Variety is the chief ingredient: simplicity and uniformity are qualities called in to keep it from running into confusion. It is a due balance of these qualities that produces beauty.

I am far from advocating a return to any ancient practice; but, a beauty having gone, I would suggest its loss as a motive for exerting the imagination to conceive a substitute, consonant with and worthy of our new means and appliances. In doing this, the facilities presented by cast-iron should not be forgotten. I have seen the common sliding sash introduced even in buildings where the display of pure Greek design, rather than any adaptation of ancient elements or expression of modern purpose, was the object of the architect. Now there are some critical eyes so fastidious as to be offended by the association of a window of any kind with pure Greek design. I believe the window to be as proper as the roof, but the character of our sash is well calculated to foster prejudices against the whole.

Something different to the present window, I am convinced, our Anglo-Saxon architecture, in all its adaptations, demands. To me the rich antique dressings in most instances appear thrown away, for they only embellish, to say the least, a void—a nonentity. This is one of the few departments of the art in which we have no ancient example or model, but assuredly our present practice is opposed to those principles of adjustment which guided the ancients in every department of their works, and to the relations which essentially constitute architectural beauty. Had the Romans possessed our means, in the way of glazing materials, for filling up their window apertures, they would have brought a little more feeling and imagination to bear upon it; and something more of the magic beauty of form than we have exhibited would have resulted in their sashes. In fact, I believe the classic window affords the greatest scope for beauty, though it has hitherto had no place in our design. It is a germ of life, and grace, and expression, hitherto dead, and that has yet to be unfolded to the day.

It would seem as if architects generally felt the inconsistency of their treatment of the window; for, in competition drawings, we usually find the sashes are left out, as if they were not deemed likely to improve the design,—very different from the case of the Gothic window, which is considered essential, and is calculated upon and brought into requisition accordingly. In truth, it is only the effect of custom upon the eye that renders them tolerable in any harmonious design. In ordinary dwellings people of taste paint their sashes black, to render them less conspicuous.

Against what I have advanced it may be replied that the window as at present treated is sufficiently expensive; but it is for its due proportion only of decoration that I contend. My object is to show that the window is not treated according to its importance, and to urge its just claim to consideration. In order to distribute decoration justly, we should first consider what are the essential features of our architecture, and what the relative importance of those features, and bestow our attention in proportion to their merits. Windows, doors, chimneys, pitched roofs, and gables are the things we have to decorate,—which we should do before giving unessential decoration, or, in other words, introducing features which are purely for ornament. How often do we see windows mere perforations, while columns and pilasters, and other elements non-essential to the construction, are used as embellishments. A mere aperture, glazed in the rudest manner, will admit the beams of the god of day, but it is a dead feature, a dumb organ, and cannot be looked upon as an object of art.

Samuel Huggins.

THE ARCHITECTURAL ASSOCIATION.

The room at Lyon's Inn, Strand, was very full at the opening meeting of the Architectural Association on Friday, the 4th inst., and the walls and tables exhibited a fair sprinkling of drawings and prints: the sketches of the class of design did not show so much improvement on those of last year as we should desire.

Mr. J. P. Seddon, one of the secretaries, read the report of the committee, which stated that the association was in a flourishing condition: there are now 150 members. A balance-sheet was not given. As to the Architectural Exhibition, it communicated the gratifying information that it had been visited by 10,000 persons, and that the receipts were nearly sufficient to cover the expenses. It proceeded, "Your Committee, convinced of the importance of an exclusively architectural annual exhibition, have thus, at a considerable expense

to the Association in the first instance, and undeterred by the risk of failure which many prophesied, or the fear of the odium which would attach to such failure, taken upon themselves its establishment. They have again, however, to say that it is not their wish to retain entirely in their own hands that which ought to belong to, and be supported by, the whole profession. So soon, therefore, as they shall see that its condition is such as would justify them in so doing, it is their desire to render it independent, and they hope shortly to be able to invite such of the exhibitors as may have shown the greatest interest therein, to co-operate with the committee of the exhibition."

The chairman, Mr. John D. Wyatt, read an address; after which Mr. W. Young read the report of a committee appointed to consider the subject of competition, which we have given in full.

The chairman then invited various gentlemen successively to address the meeting.

Mr. Godwin expressed his gratification that the exhibition, although opened at a time when London was empty, had been so well attended. He hoped it would be arranged earlier next year, and that three or four of the leading members of the profession would be associated with the committee to endeavour to render it worthy of the country. In the course of his remarks on the competition report, he drew attention to the propositions issued by the "Bristol Society of Architects."* With respect to No. 3, which suggests that the successful competitor should be required to find responsible contractors to complete the works for the sum specified in his own estimate, and in default thereof to relinquish all claim to compensation,—he said he thought this was, at all events, a questionable step. He considered, as he had on other occasions said, that an accurate estimate, founded on calculations, ought not to be expected from an architect unless he was paid for making it. If a competitor sent a design which manifestly to the eyes of judgment could not be carried out for the sum stipulated, it ought not to be admitted, but he thought it very doubtful if such a proposition as that he had referred to should be suggessed to committees. The speaker referred briefly to the questions now engaging attention, and rejoiced that the report had not left untouched the importance of inculcating a high feeling on the part of the profession. Each should act as if he held in his hands the honour of the whole profession.

Mr. C. Fowler expressed his good wishes for the Association: their establishment of an Architectural Exhibition was most praiseworthy, and he regretted that his engagements had prevented him contributing: it was almost discreditable not to have an exhibition of architectural works. As to the competition matter, he knew something about it, from the part he had taken in framing the report of the Institute, and he feared the difficulties were too formidable to be overcome by the course pursued: still they should not relax in their endeavours. He would echo the remark of the last speaker as to the feelings with which the profession should be pursued: an architect should be a man of taste and a gentleman.

Mr. Hall, in the course of some observations, said, he must claim for the Manchester Architectural Society the merit of having originated the opposition to the proceedings of competition committees. As to the value of competitions, he thought he must object to them altogether, as doing more harm than good. He was glad to find that the exhibition had been visited by many workmen, as we should in our turn benefit by their improvement.

Mr. Billings introduced to the meeting a number of plates, further elucidating the system of geometric design. In the first series he had published, the designs had been constructed on three circles, placed at some distance from each other, and he had found that the nearer they were brought together the less was the variety obtainable. The moment the circles touched, however, the power returned, and the series of traceried panels which he then laid before them were constructed out of circles so placed.

Mr. Inman, Mr. C. H. Smith, and others, also made some observations.

* See BUILDER, page 472 *ante*.

MANAGEMENT OF ARCHITECTURAL COMPETITIONS.

REPORT of the committee appointed July 27, 1849, by the Architectural Association, to consider the subject of Architectural Competitions in connection with the published report of the Royal Institute of British Architects, and the practicability of the suggestion that "Architects should meet together and lay down a set of regulations as to on what terms they ought to furnish designs in competition."

IN now, for the first time, producing their report to the Association, your committee feel that it may be required of them to explain why a period of more than twelve months has been allowed to elapse between their appointment and the production of the result of their labours.

They beg to state that the delay has arisen, not from any difficulty which they have experienced in recognising the practicability and utility of the proposal made by Mr. R. Brandon and others for the convening of a public meeting of the members of the architectural profession, but from the extreme difficulty of another task which your committee have imposed on themselves, without accomplishing which their labours would certainly seem incomplete. They allude to that of producing a code of regulations for future architectural competitions which might ensure the approval of even a majority of their own body.

With reference to the report of the Royal Institute of British Architects on Public Competitions for Architectural Designs, it may, after the long delay just explained, be necessary to remind the members of the Association that copies of that document were, some time prior to the appointment of the committee, most obligingly forwarded spontaneously to the committee of the Association by the secretary of the Institute, Mr. Scoles.

Your committee have several times perused, and very maturely considered, this report: they have themselves adopted it as the basis of the code of regulations which, in the absence of a better, they recommend the Association to submit to any public meeting of the profession it may invite, or in any other manner convene; and they strongly urge the Association to adopt that report as the basis of any proceedings it may publicly identify itself with. It will be found on perusal to contain a most lucid exposition of the evils of the system that so loudly calls for regulation at the hands of the profession, the only proper body to reform it. Yet your Committee have one objection to raise to this report of the Institute, even in its character of an exposure of the evils attendant on competitions; and that objection is, that owing to the period that has elapsed since its publication, in 1839, and the indifference with which the subject has been treated by the professional body, new evils have sprung into existence, so that the report, viewed even as a mere catalogue of evils, is, in 1850, incomplete.

Architectural competition, a system, if properly conducted, replete with advantage to art, to architects, and to the public, has degenerated from an ordeal or touchstone, however imperfect, of architectonic excellence, into a mere monetary speculation, in which, as matters now go before the public, the incompetent adventurer, with means to afford and mere *nous* to avail himself of the extensive aid of the professed painter, the carver and gilder, and the lithographer, is far more frequently successful than the erudite or the skilful architect, who fondly trusts he need not avail himself of such extraneous aid to secure the patronage of "a discerning public."

Your committee feel sure that it is quite unnecessary to adduce cases which substantially confirm the truth of this observation.

The result of the present state of the system may be seen almost daily in the lowered condition of our art, and the comparatively low estimation in which as a profession it is held, especially by those of their fellow citizens whose respectful consideration is to be desiderated,—the painter, the sculptor, the scientific, and the man of letters.

The committee have duly discussed amongst themselves the course to be adopted in the convening of a public meeting of architects in London, with a view to their adoption of some tangible code of regulations, in compliance with which they may consider all competitions ought to be conducted.

They do not trouble you now with the details of the programme of such meeting, but these details will be found to have been carefully considered. It may be thought sufficient, for the present, to advert to the general mode of procedure recommended, which is as follows:—

They propose that the Association shall, as early in the course of the present session as practicable, solicit some leading member of the profession to undertake the office of chairman, and (on the intimation of the co-operation of a few architects unconnected with the Association to support him), convene by public advertisement a meeting of architects, which may serve as a preliminary meeting for the adoption, *pro tem.*, of the code of regulations of your committee, or of any other the assembly may consider preferable to it. Such code to be thereupon printed and circulated for the consideration of all architects and architectural societies in Great Britain and Ireland, by a committee of gentlemen to be nominated at the meeting, who shall thenceforward take the matter out of the hands of the Architectural Association, select their own officers, raise subscriptions to defray the trifling expense of corresponding with the profession throughout the kingdom, and eliciting from the members of it their advice and opinion of the regulations submitted to them as beforementioned, preparatory to the convening of a *second general meeting* of architects in London, for the purpose of revising the said code of regulations, submitting it for approval to the Royal Institute of British Architects, and adopting it as binding in professional etiquette upon all architects; particularly members of the Institute, the Architectural Association, and such provincial architectural societies as may, by their accredited officers, identify themselves with it.

Your committee do not suggest that any code of regulations drawn up by architects shall supersede, but rather that it should be superadded as a pendant to, the usual instructions to architects, which, wherever they do not contravene the regulations, and so become *ipso facto* nugatory, should be held to be binding on competitors and committee alike.

As respects the code of regulations, which, in the utter non-existence of such a document, your committee venture to recommend as a nucleus for the consideration of the contemplated first public meeting of Architects, it is the result of mature deliberation on their part, and of the advice of others experienced in the question of competitions. They have drawn it up with some assurance that, although it may not be found to meet in every particular the ideas of each member of the profession, or even of the Association itself, it is essentially calculated to obviate the generally acknowledged evils of the present objectionable system, and in the main to secure the suffrages of the professional body, as the most useful form for regulating competitions that has yet been devised.

Yet, as it did not originally form part of the duties assigned them, your committee do not, by now reading it, seek to commit the Association to the document in question.

In conclusion, your committee earnestly hope the Association will not be discouraged by the seeming boldness of the step herein advocated. Great interest is now being felt on all sides on this and other questions affecting the well-being of the profession; and it is surely not too much to hope that the Architects of this country, once organised, with a well-digested code of regulations brought prominently before them, will at last bestir themselves, and effectually, to put an end to the present anomalous system. Nor let the Association be dispirited if, haply, they should succeed only in enlisting the active sympathies of the junior members of the profession in this cause; for it must be borne in mind that it is, in fact, these only that the system of competition materially affects; and if by the labours of the Association the young Architects of the kingdom, whose ideas of professional respectability are under the present system tempted to sad confusion, can be brought to enunciate a collective opinion on the right management of competitions, a great good will have been effected, and sooner or later the object we now strive for will be gained, it matters little by whose immediate agency.

Your committee are strongly of opinion it will be sufficient for the Architectural Association to simply agitate the question, and pioneer the way for its being brought to a definite issue, without being themselves over anxious to identify *their* name with any measure the profession may ultimately adopt.

Allusion has already been made to the Royal Institute of British Architects, to whom it is highly desirable, not to say decorous, to refer in this matter.

Their report, to which your committee's attention has been so long given, states that the attainment of an amelioration of the system "*rests with the profession at large*," and, therefore, there is every reason to think that should they be consulted, they will cheerfully set their seal (so to speak) on any sound measure for amending the system which any numerous body of architects may be found to agree upon.

Should you be disposed to question whether or not the public will be likely to favourably recognise, and fall in with, any measure so sanctioned by the profession, your committee feel that they cannot close their labours better than by expressing their conviction that, in the words of the Institute's report, "in a very great majority of cases of competition the committees, or parties to whom judgment is confided, are quite ready to acknowledge themselves deficient in the means of fulfilling their duty, when once the nature of that duty is candidly and temperately explained to them; and that any suggestions to the effect above stated will be favour-

ably received, when offered in proper terms and at a proper season."

Code of Regulations* for Public Architectural Competitions, suggested for the consideration of all Architects in Great Britain.

Designs.—Competitors to be at liberty to submit one or more designs, as they may think fit; but each design to comprehend no more than the following drawings; all further drawings, or drawings otherwise executed, and all models,† engravings, written or printed particulars, specifications, letters, address cards, circulars, testimonials, tenders, or other papers, to be at once set aside, *so as not to be laid before the adjudicators*, nor are the committee to hold themselves responsible for their safe return to their respective owners.

Drawings.‡—Plans of each story, tinted at discretion.

No. —. Elevations, in outline only; save that metal work, roof, and apertures may have a light *monotint*, if desired by the author.

No. —. Sections, tinted at discretion; the non-"sectional" parts executed as elevations, above described. (Drawn to a scale of feet to an inch.)

No. —. External perspective views, in outline§ only.

No. —. Internal perspective views, in outline only.

The size of each view may be less, but is not to be greater than inches by inches, *in*clusive of a single line margin, or a "mount" of plain tinted paper or board, should the competitor desire one.

All drawings are to be executed on *separate* sheets of *white* paper or card-board, transmitted flat, attached or not, at discretion, to strainers or other "backings," but without varnishing, glazed or other frames, coloured, embossed, or other ornamental borders, margins, or mountings whatever, save the views as before mentioned.

Mode of transmission, &c.—Each design, distinguished *only* by a device and motto, marked on *the right hand lower corner* of each respective drawing, and accompanied by a brief description of the proposed building, its general mode of construction, and probable cost (similarly marked), is to be forwarded, carriage free, to , on or before day, the of . On the adjudication, the names of the devices and the mottoes of the selected designs to be communicated by letter to each of the competitors; and, on their identification, the rejected designs (save such as may have been disqualified by non-compliance with these Regulations) to be returned, carriage free, to their respective authors.

Cost of building.‖—The cost of the building not to exceed the sum of , *in*clusive of the architect's commission and expenses, and salary of clerk of works.

Adjudication.—As respects matters of taste or convenience, the committee not necessarily to pledge themselves to be actually *governed* out of their own body; but in all matters relating to the efficient construction of any designs they may approve of, or the accuracy of the author's estimates accompanying them, they are to be *guided* by the opinion of some one or three non-competing architects or other professional judges,¶ to be recommended to them by the general voice of the competitors. Each competitor is therefore, on delivering his design or designs (*and only then*), to submit the names and addresses of any one or more professional men, not exceeding three, to whose judgment or experience he himself is willing to refer the committee for guidance in this matter.

Premiums, &c.—The architect whose design is selected, to be employed as architect of the building, provided his character be such as to render him unexceptionable. If not employed, he is to be paid a premium of 1 per cent. on the amount of his estimate, which sum (in event only of such adopted design being carried out) is to be deducted from the commission of the architect employed in his stead.

A premium of * to be paid to the author of the second, and of to the author of the third best design; the design selected for execution alone remaining the property of the committee.

Exhibition of designs.—The committee to reserve to themselves the right to publicly exhibit or not, as they may think fit, the whole of the designs; but in such case to pledge themselves that the exhibition shall precede the adjudication. The cost of such exhibition to be borne by the committee; the proceeds, if any, after defraying expenses, to be applied to the building fund.

* These Regulations are not meant to supersede, but rather to be super-added to, the usual "Instructions to Architects," which (wherever they do not contravene the Regulations, and so become nugatory) should be held as binding on competitors and committee alike. Such instructions should be (particularly in matters of required arrangement of the intended building) as full and as explicit as possible. Some very excellent observations on the importance of committees issuing well-digested instructions to architects are given in a brief Report on Competitions by the Royal Institute of British Architects.—Weale, Holborn, 1839.

† In some cases models might be advantageously specified, but if so, they should be of uniform scale and character, be required of *every* competitor, and be placed on a uniform level with the eye of the spectator.

‡ Here specify as few, and *as small* drawings, as may be consistent with the intelligible representation of each design. Thus the labour of selection will be greatly lessened, and committees may save themselves much annoyance and expense, attendant on the transmission of unwieldy packages, and even the hire of vast suites of rooms, necessary for the stowage and inspection of large drawings.

§ As *natural* representations of an object, mere outline views are necessarily imperfect; but although shadows and tints are very desirable, *strict equality* in the scenic representation of each competitor's *design is absolutely indispensable;* nor can this desideratum be so well attained by the adoption of any other medium as by that of mere outline.

‖ Here, if it be intended to limit the cost to any amount already determined, be careful to state the *utmost* sum that is now, or is *at all likely* to be, placed at the committee's disposal. It will be found in practice far easier to lessen the cost of the building *after* the competition, than to avoid the imputation of unfairness usually attached to any material subsequent extension of it for the sake of carrying out an eligible design, for which funds have, in the first instance, been barely provided.

¶ "It is not here intended to restrict the term 'professional' to architects; but to apply it to the members of all professions whose advice may be made available to the arrangement of buildings of various classes."—*Report R. I. B. A.*

* From a calculation made, it would appear that the average practice of competition committees in England during the last ten years has been to award for their first premium sums equivalent to 1 per cent. on estimate under 10,000*l.*; of ½ per cent. under 100,000*l.*; and in large competitions, where six or more premiums should be given, of ¼ per cent. under 500,000*l.*

CHARACTERISTICS OF STYLE IN ORNAMENT.

On Friday evening in last week, Mr. R. N. Wornum lectured at the Government School of Design, Somerset House, on the technical characteristics of style in ornament: first, of the Egyptian, Greek, and Roman, as illustrative of ancient ornament; and, next, of the Byzantine, Saracenic, and Gothic, as illustrative of that of the Middle Ages.

The earliest style of ornament we know anything about, proceeded the lecturer, is the Egyptian, and this is literally a hieroglyphic style of priestly symbolism, both in sentiment and detail. As a rule, the elements of this style have a particular meaning, and are not arbitrarily chosen for the sake of beauty of effect. It is therefore very simple and limited, in comparison with later styles, in which mere symbolism was superseded by the purer principles of art. Yet we cannot but admire the ingenuity with which the Egyptian artist, by a mere symmetrical arrangement, has converted even the incomprehensible hieroglyphics into pleasing and tasteful ornaments. A mere symmetrical arrangement, however, is the limit of his artistic scheming, and generally in the shape of a simple progression, whether in a horizontal line, or repeated on the principle of the diaper, that is, row upon row, horizontally or diagonally.

When we consider the hierarchical vassalage of the Egyptian artist, and that he was by birth and not by choice in his profession, we must admit that he displays peculiar ability. In many respects the art was as thoroughly understood at Memphis or Thebes, 3,000 years ago, as it is at London or Paris this day: the shapes of the Egyptian ewer, bason, and other domestic vessels, are identical with those of the most favourite patterns of the present time; and many of their ornaments are still popular ornaments, and have been so through all times,—as the fret or labyrinth, wave-scroll, spiral, zigzag, water-lily, star, and palm, besides many others derived from the natural productions of Egypt. The student, therefore, who may wish to produce an Egyptian design is not so limited as he might imagine: he is more limited in the disposition than in the materials. Very few, however, of these elements are sufficient to stamp a design with an Egyptian character.

In the first place, Egyptian ornament admits of no pictures of objects: all are treated conventionally: even in the wall-paintings themselves no object is fairly painted as it actually appears: the best examples are but intelligible representations—mere diagrams or elevations.

The arrangements are almost exclusively a mere symmetrical progression, and always of a very simple order; though precious stones and metals, and the richest materials generally, seem to have been very abundantly used. The frieze is the commonest form of these decorations, and the details are generally some of the more important symbols, as the lotus, or water-lily of the Nile, the type of its inundations, from which Egypt derives its fruitfulness, and the zigzag, the type of water, or the Nile itself: this ancient signification of the zigzag is still preserved in the zodiacal sign of the water-carrier, or Aquarius.*

There is, however, one particular ornament which is more common than all others in Egyptian decoration: this is the winged scarabeus or beetle, or winged globe. It is a species of talisman, or invocation of good luck. The globe is supposed to represent the sun, the wings providence, and the two asps, one on each side of the globe, dominion.

We almost invariably find this ornament placed over doors, windows, and passages, and it is sometimes of an enormous size, extending to 30 feet or more. The swelling asp alone (the *cobra de capello*) is a very characteristic ornament: we find entire friezes and borders composed of a mere succession of these asps, and it is very common to find them arranged also in symmetrical opposition, one on each side of the cartouche enclosing the hieroglyphic name of a king, having the same reference to dominion.

The essential symbolic characteristics of an Egyptian design, then, are these five,—the winged globe, the lotus, the zigzag, the asp, and the cartouche containing hieroglyphics. These you may mix up with many arbitrary or geometrical forms, as the fret, spiral, star, and any of the natural productions of Egypt, conventionally treated, and a simple symmetrical progression, every detail almost having a symbolic meaning beyond its mere ornamental service in the design. Gaudy diapers and general gaiety of colours are likewise characteristic of this style, but the colours had better, perhaps, be limited to red, blue, yellow, and green to preserve a strictly historical or Egyptian effect.

The Egyptian style of decoration was not without its influence on all people connected with Egypt,—on the Jews, the Greeks, and more especially the Persians after the plunder of Thebes by Cambyses, who carried a colony of Egyptian artists into Persia; and we still see the remains of their influence in the whole valley of the Euphrates, from Nineveh to Persepolis. The so-called Nineveh sculptures recently deposited in the British Museum are identical in style with those of Persepolis, the work of this Egyptian colony introduced by Cambyses at the close of the sixth century before our era. The bull figures chiefly in these sculptures as he does in Persian mythology. It is hazardous to venture an opinion upon the period of works such as those from Assyria, which, to all appearance, have their history inscribed on them; because these inscriptions, when interpreted, may prove a very authentic contradiction to the opinion ventured; but according to our tests of characteristics of style, the sculptures lately brought from the site or vicinity of the ancient Nineveh are certainly of the same school as those of Persepolis, and of the same time: they are Egypto-Persian, and very few years, if any at all, older than the Elgin marbles.

The most characteristic elements of the second great historic style—the Greek—continued the lecturer, in recapitulation of preliminary remarks on the Doric or early, and the Alexandrian or later, Greek styles, are the wave-scroll, the fret, the horse-chesnut, the astragal, the volute, the anthemion, and the guilloche. The ordinary scroll and acanthus must be kept subdued in comparison with the anthemion; for in the sense in which we use the term, they are much more characteristic of Roman than of Greek art. It is the same with the three great classic orders—the Doric or Echinus order, the Ionic or voluted

* This illustration of the meaning of an ancient symbolical ornament induces us here to remark, that in Gell's "Pompeii" we lately stumbled on a striking illustration of the truth of an idea we had previously entertained in regard to another symbol, which, though it has less to do with architectural ornament, is of general archæological interest, and may afford a suggestive hint in connection with that of Aquarius and the zigzag towards the elucidation of other symbols. Like that of the sign Aquarius, the symbol alluded to is also astronomical, being that of the planet Mercury, in fact, still in use, and somewhat resembling a crescent moon placed above a circle with a cross beneath ☿. The peculiar style of a sculptured figure of Mercury's caduceus, engraved in Gell's work together with the form of the god, and in which the two serpentine forms were made to issue *from the point of the rod*, and twine with each other above it altogether, in form of a circle surmounted by a crescent, the wings appearing *below*, as if branching from the middle of the rod, clearly indicated the correctness of a previous idea that the apparently arbitrary and unintelligible symbol of the planet Mercury used by astronomers, is nothing else than a diagram or skeleton of Mercury's winged rod with its serpents!

order, and the Corinthian or Acanthus order—all three Greek by origin; but the Acanthus order was very little used by the Greeks, while with the Romans it was the favourite.

We come now to the third and last ancient style—the Roman; but we need not dwell upon this, because it did not add a single element to the Greek, although it elaborated these elements with every possible variety of effect, and with all the exuberance and richness of which they are capable. Its chief characteristic is its uniform magnificence. Even the architectural orders have not escaped this enrichment. The free introduction of monsters and animals is another characteristic of Roman as well as of Greek ornament, as the sphinx, the triton, the griffin, and others: they occur, however, most abundantly in the Roman.

The Middle-Age styles we may term the Christian, in contradistinction to the ancient as the Heathen. During the first and second centuries, Christian works of art were limited to symbols, and were then never applied to decorations, but as exhortations to faith and piety, and all Christian decoration rests on this foundation, till the return to the Heathen principle of beauty in the period of the Renaissance. The only symbols were the monogram of Christ, the lily, the cross, the serpent, the aureole, or vesica piscis, and the circle or nimbus, the glory of the head, as the vesica is of the entire body. These are very important elements in Christian decoration, especially the nimbus, which is the element of the trefoil and quatrefoil, so common in Byzantine and Gothic art. These matters, continued the lecturer, I explained in detail in my lecture on this subject, and can now little more than refer to them. After a systematic exclusion of the symbolic modifications of ancient Paganism for about 400 or 500 years, they were gradually adopted, and became eventually a very prominent feature in Byzantine decoration, and a most comprehensive style of decoration was rapidly developed, although they never attained that purity of detail which characterizes the works of the Greeks.

The Byzantine, the Lombard, and the Norman, are the chief varieties of the Romanesque, but the two latter may technically be considered as mere modifications or varieties of the former.

The principles of the Saracenic style are soon stated. The Byzantine artists were pressed into the service of the Arabian caliphs and generals, and ordered to raise rich mosques and palaces; and Damascus, Cairo, and Cordova show the admirable ingenuity with which they accommodated themselves to their new circumstances. Vegetable forms were now excluded, as there was to be no image of a living thing; but the Byzantine Greeks were sufficiently skilful to make light of such exclusions. Mere curves and angles, or interlacings, were now to bear the chief burden of a design, but distinguished by variety of colour. The curves, however, very naturally fell into the standard forms and floral shapes, and the lines and angles were soon developed into a very characteristic species of tracery or interlaced strap-work, very agreeably diversified by the ornamental introduction of inscriptions. This style, as applied to textile fabrics, such as damask, has lately reached our railway carriages. You may see now worsted borders, in which the initials of the company are worked as an ornamental pattern right and left and upside down, as in an Eastern example pointed out. The Siculo Norman, from which our Norman is derived, is as much a variety of the Saracenic as of the Byzantine. It is displayed in great magnificence in the Cathedral of Messina.

The lecturer then proceeded to the last great middle-age style, the Gothic; but of this we have little space remaining to enlarge on. The most striking feature of all Gothic work, he remarked, is the wonderful elaboration of its geometric tracery,—vesicas, trefoils, quatrefoils, cinqfoils, and an infinity of geometric varieties besides. The tracery is so paramount a characteristic that the three English varieties, the Early English (?), the Decorated, and the Perpendicular, are distinguished almost exclusively by this feature: it is the same with the French Flamboyant,—the flame style, from the waving lines of its tracery. The Decorated, though chiefly characterised by a more magnificent development of the leading elements of the Early English, more especially the tracery, has its own features,—the ogee work, and the pinnacled canopied recesses producing a prominence of diagonal lines. The Perpendicular has the horizontal line, the panellings, and the substitution of perpendicular for flowing tracery as its more characteristic features. The Tudor is scarcely Gothic, as the art in it returns to what it was in the Romanesque, and again becomes horizontal.

It thus appears, said the lecturer in his concluding remarks, that all styles, however individual in character, are intimately connected with those which preceded them, and that an advantage once gained was not allowed to be lost.

ASSESSMENT OF BIRMINGHAM.

When we last reported the progress of the Birmingham guardians in their pursuit of a surveyor to assess that important parish (p. 466, *ante*), the question laid between Messrs. Leversidge and Corfield, Mr. Newey, at 1,445*l.*, and Mr. J. D. Paine at 945*l.*, and we mentioned that the committee came to the determination of recommending the last for election. A meeting of the board of guardians was held last week to confirm that decision, or take such other proceeding upon it as might be determined on. Mr. Newey, it seems, is the parish surveyor, and the business was initiated on this occasion by reading a letter from him, containing the somewhat mystical announcement, that—"it had been stated in the public papers that his tender was 500*l.* above Mr. J. D. Paine's, and true it was so; but in the event of his obtaining the appointment, *of course*, his tender would be reduced to 1,220*l.*, as he would receive by way of salary 225*l.* during the period he had offered to complete the work in; which together make up the gross amount of his estimate 1,445*l.*" After a long discussion it was resolved, by 32 to 3, that a ballot be taken on the three candidates, which being done, the issue was: for Mr. Newey, 29, and for Mr. J. D. Paine, 15. No votes were given for Messrs. Leversidge and Corfield. Mr. Newey was then formally declared elected, with the stipulation that during the performance of his contract (eighteen months), his salary as assistant overseer for surveys should be discontinued. The amount of security required was fixed at 700*l.*

One of the guardians said, that from a calculation he had made, he found that Mr. Paine would require in order to get done in the time he named, to measure, survey, and value 127 assessments every day, not allowing for weather, casualties, or health. He maintained that no man could do the work personally or satisfactorily in that time.

PROPOSED WINTER EXHIBITION OF ART.

Several friends of art and artists, without any personal motive so far as we can learn, have organized a winter exhibition of drawings and oil sketches by our best artists, under novel arrangements. All the drawings (about 300 in number) are to be of one of two fixed sizes, and will be mounted and framed, all alike, by the projectors. Means of effecting sales of works *bonâ fide* the property of the artist will be provided without charge. The gallery of the old Water Colour Society, Pall-mall East, has been fitted up for the purpose, and will be opened in a few days. The result promises to be as interesting as the motive is praiseworthy.

Decorators and Designers in the '51 Exhibition.—100 spaces for ceilings, 24 feet square, will occur in the new building, and will be put at the service, on application, of workers in plaster, wood, paper, and colour for decoration. It may not be generally known that there are already applications for more space than the building will afford: those, therefore, who really desire to exhibit should *at once* send in notice to the commissioners of their district. Architects should exhibit models of their works. Designs for new modes of construction, ornamental iron-work, &c. are admissible.

THIRKLEBY CHURCH, YORKSHIRE.

The church of All Saints, Thirkleby, was first erected about the twelfth century, if we may form any opinion from the few fragments of that date discovered whilst pulling down the recent building and excavating for the foundations of the new church., Other fragments of the various successive styles of architecture, also discovered at that time, show that this building underwent the usual changes incident to the fuller development of the mediæval art, until, we may presume, the fabric was so shattered by the caprices of the various renovators, that it was again deemed necessary to entirely rebuild it: this was done about the year 1722 by Sir Thomas Frankland, Bart. At this change every vestige of the former building appears to have vanished, and, except the fragments before alluded to, nothing remained to show what it was, or what extent of ground it occupied. In taking down the roof and ceiling of Sir Thomas's church many of the main beams appeared to have originally belonged to a building of the time of Henry VIII., probably one of the numerous alterations of the original building, and were used in the more recent work: these beams were moulded and evidently formed parts of a flat panelled ceiling.

The church erected by Sir Thomas Frankland was in the Italian style of *that* period; a large oblong room lighted at the east end by a Venetian window, the centre part of which was circular-headed, and on each side by two square-headed windows; the ceiling was plastered, and the beams and purlins formed large clumsy panels; the walls and ceiling were white-washed; the best parts of the work were the oak panelled open seats.

Externally the quoins were rusticated: there was a projecting porch, upon the cornice of which stood two chubby children with inverted torches, and two urns with festoons of flowers. The roof was terminated at each end by a pediment,—over the west was a wooden turret inclosing a small cracked bell.

At the east-end of this building was the family vault, and that of the incumbent was on the south side: these were the only vaults in the church, and the greatest care has been taken that they should not in any way be disturbed by any portions of the new building.

Although the re-erection of this church had been long contemplated, it remained for the present proprietor of Thirkleby-park to carry out the plan. The sudden bereavement which this lady sustained induced the re-erection of the parish church, as an appropriate and noble tribute to the memory of the late Sir Robert Frankland Russell. In fulfilling this object many considerations were necessary; the family vaults should not be disturbed; the accommodation for the parishioners should be ample, but not crowded; and all the accessories should be such as would be consistent with the object required; at the same time the character and expression should depend more upon a suitable and harmonious application of *form*, than an elaborate display of ornamental detail.

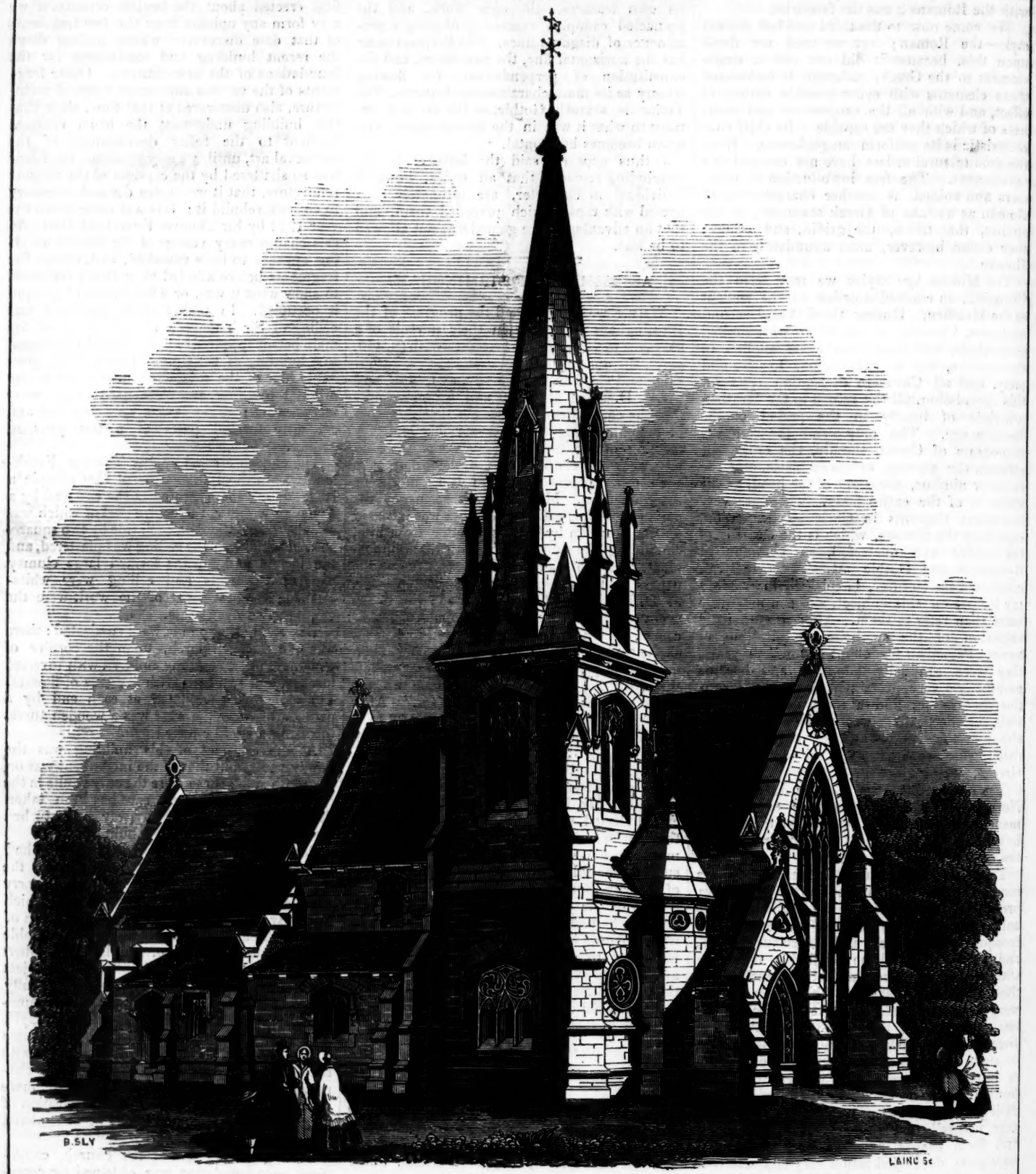
During the erection of the church, convenient accommodation was obtained for carrying on the service, in the riding-house attached to the mansion; all the internal fittings were removed from the church to this place, and the archbishop's license obtained to perform the service there until the new building is completed.

The church erected in 1722 was a parallelogram about 50 feet long and 26 feet wide, but being without a chancel, it was necessary to extend the new building 24 feet westward, and otherwise to enlarge the area by the addition of the north aisle and tower. The new chancel, nave, and south aisles were erected on the old foundation walls so far as these walls extended, from the level of the ground: these were found to be very sound and thick, and only required additional widths for the buttresses, and new foundations for the nave piers. The whole of the new foundations were carried down to the bottom of the old foundations, and very carefully bonded to the old work.

The new church consists of a nave 48 feet 6 inches long, 17 feet 8 inches wide; north aisle, 42 feet long, 7 feet 6 inches wide; south aisle, 48 feet 6 inches long, and 7 feet 8 inches wide; chancel, 25 feet long, 15 feet wide;

ALL SAINTS' CHURCH, THIRKLEBY, YORKSHIRE.

Mr. E. B. LAMB, Architect.



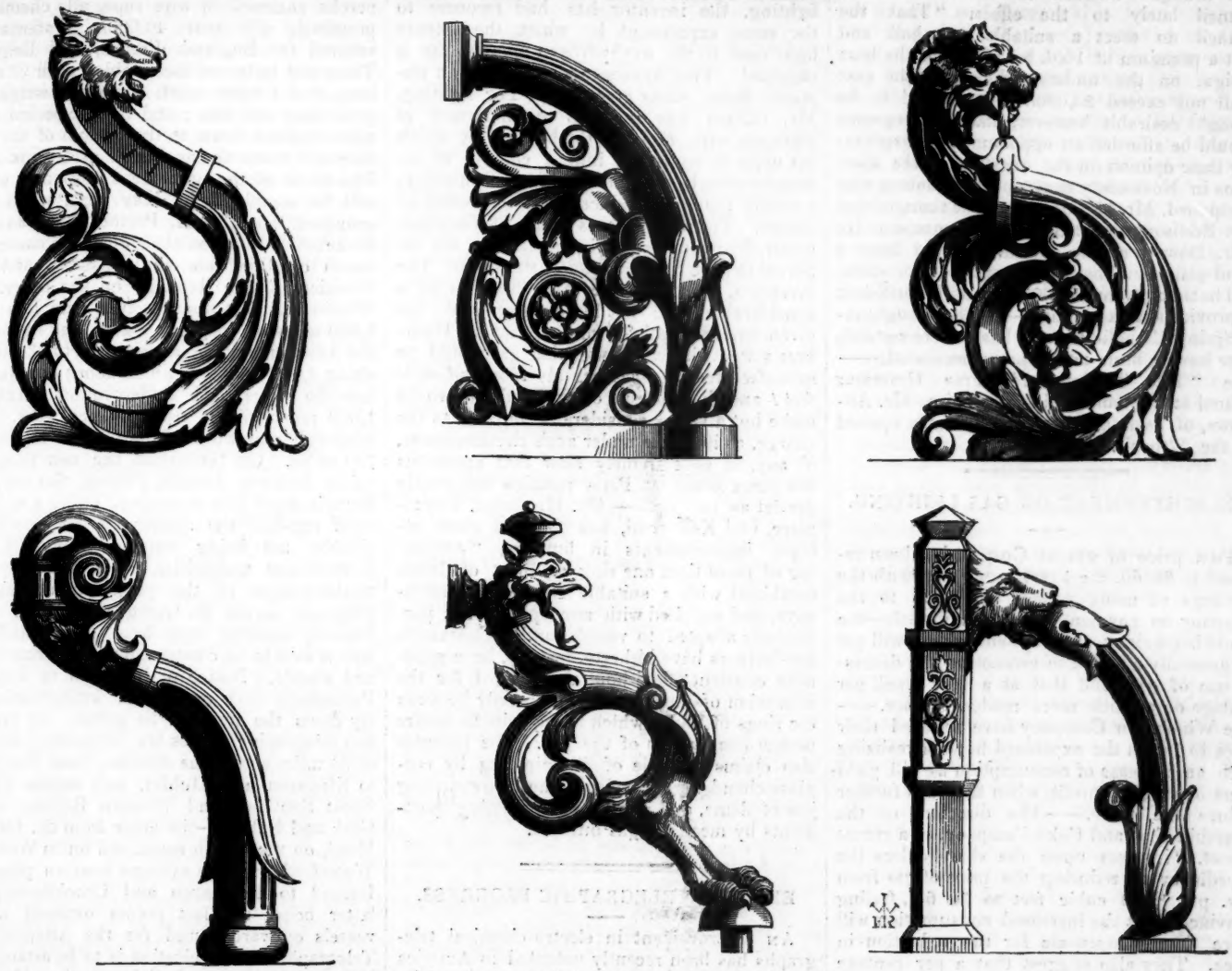
north aisle, to be used partly as a robing-room; and priest's entrance, 13 feet 6 inches long, and 9 feet 3 inches wide: south aisle, divided into the Frankland aisle, 13 feet 6 inches long, and 9 feet 3 inches wide, and an octangular monumental chapel or chantry at the east end, 9 feet 6 inches in diameter. On the east side of this chantry is placed a canopied monument divided into six panels, to be filled with brass tablets: over this monument is a traceried equilateral window; the north side is wholly filled with another traceried pointed window of two lights; opposite to these windows are the arched entrances to the chantry, the other four sides have coupled panels, with trefoil heads, and are to be filled with brass tablets of the ancestors of the Frankland family; these will be in place of the marble tablets removed from the old walls, which from their form and character could not, with propriety, be placed on the walls of the new building. It should be mentioned, that the lowest portion of the plan of the chantry is square, and the octagonal form is given to it by arched corbels in the angles; these on the first stage are not equal in size, but the regular octagonal form is again produced by corbel arches, from which spring the stone-groined roof. Heraldry and stained glass will form portions of the decoration of this part of the church. The Frankland and north aisles are each separated from the chancel by two arches, the central pier being octagonal, with moulded cap and base, some carved corbels terminating the sides of the arches. The nave has on each side three large arches upon octagonal piers, and small arches at the east end, under which are the entrances to the pulpit and reading-desk. At the west end of the south aisle there is also a segmental abutting arch. In the lower portion of the tower is placed the font, and in the next story will be placed the monumental tablets formerly on the old walls, and it will be easily approached by the stair-turret shown in the sketch. The whole of the seats will be open, rather low, and with plain ends and moulded back-rails. The roofs are of oak, arched and hammer-beam trussed, open, and, under the hammer-beam, curved ribs, supported by corbel columns.

Externally, the north and west fronts of the building require no further explanation than the sketch. The east and south fronts present unusual forms, from the additional height and importance given to the Frankland aisle and chantry.

The style of the architecture partakes of the character in use at the time of Edw. III., but is *freely* applied, so as to combine with the general form which the requirements of the building produced.

The whole height of the tower and spire is about 92 feet; to the top of the vane, about 100 feet; to the point of the west gable, about 50 feet. The position of the tower, detached from the highest part of the church, materially assists in giving it a much greater

CAST IRON WORK FROM PARIS.



apparent height and consequence than it has.

The walls are externally built with rough grey lime-stone; all the quoins, with the squared stones from the former building: internally the walls are lined with brick; the dressings, moulding copings, &c. are built with Renton sand-stone; the tracery, mullions, interior of the chantry, and other delicate portions of the work, are of Hartlepool magnesian lime-stone. All the timber is from the estate. The roofs are covered with Peake's terro-metallic tiles. Mr. E. B. Lamb was the architect. The church will be consecrated in the course of a few weeks.

CAST-IRON WORK FROM PARIS.

No visiter to the French metropolis can have failed to remark the predominance of the use of iron in the exterior enrichments of Parisian houses; and it would appear that this custom, dating back at least to the time of Louis XIII., has been continued without interruption to the present day. The accompanying illustrations represent a series of iron inverted trusses, placed instead of spur stones on each side of the *portes cochères* (carriage-gateways), which are indispensable in the domestic architecture of the Continent. Their use is to give a decorative finish to the pilasters on each side of the entrance, and to prevent the wheels of carriages from encroaching on the small space allotted to footpaths. They occur in great varieties of design, but in most instances they are of recent date. We have selected for engraving those which appeared to us most elegant and most practically useful as suggestions. In some instances the adoption in our own country of these useful and ornamental appendages to gateways, might be attended with success.

Dover New Harbour.—We are sorry to hear that the force of a recent storm has damaged the works here to an extent that is estimated at 15,000*l.*

NOTES IN THE PROVINCES.

Stow Church is now under repair. The old basement stones of the chancel are being rechiselled and replaced. A contemporary, who seems to prefer renovation to restoration, says, "How can they be expected to be as substantial as the new basements of the transepts with which they have to vie? It is absurd in the extreme to employ stones which have been in wear perhaps upwards of 800 years; and, for the workmen's sake, it ought to be immediately discontinued." A supposed confessional has been discovered in the chancel, and out of one of the ashlar buttresses part of a stone coffin, forming one of the quoins, has been taken: it is said to be of Ancaster stone.——The foundation-stone of the New Corn Exchange at Thrapston was laid on Saturday week. The building will measure about 50 feet by 35 feet, and will be roofed with glass. Mr. George Eaton, of Titchmarsh, has taken the contract.——The Pavilion at Brighton is now being repaired and redecorated by contract with Mr. Vick, contractor. The committee have power to expend 4,500*l.* on the work.——St. Paul's Church, Sketty, near Swansea, was consecrated on Friday week. The new church consists of chancel, south chapel to chancel, south aisle to nave, south porch, and western tower. The style is Middle-Pointed. The east window has three lights; the two to the north of the chancel, two. The nave has, on the north side, one window of three, and two of two lights. A painted window over the altar is said to be the gift of Mrs. Jones Lloyd. The wood-work of the interior, seats, pulpits, &c. is polished oak.——Liverpool and Glasgow are simultaneously engaged in discussing projects for the erection of new post-offices, and the removal of old powder-magazines; rather a curious coincidence, which we may parallel by another "curious coincidence" relevant to our "notes," and relative to the usual material contained in powder-magazines on the one hand, and the equally usual material contained in post-offices on the other. In a recent "note," we happened to speak of using the waste power of the soldiery in promoting public works: the "curious coincidence" alluded to is simply the fact that one contemporary, in quoting this note, calls it the waste powder of the soldiery, and another actually says we recommend that "the waste paper of the soldiery" should be used "in promoting public words!" We have not a few absurdities and mistakes to answer for occasionally besides our own, if we ever have any.——The works connected with the construction of the new market at Sheffield, on the site of the Tontine hotel, are progressing with activity. Many of the arches of the cellars which are to occupy the whole extent of the sub-story, are nearly completed, and in a variety of places the brickwork appears above the ground. The entire structure is to be completed by 25th March. The area enclosed will be occupied by a covered hall, 283 feet long, 75 feet wide, and 40 feet high, an iron roof covering the whole in one span. The building will be of brick, with stone facings, simple, but massive. The sides and one end are to be occupied with shops. The contractor is Mr. Carlisle, the builder of the Beighton viaduct, and other railway works in this locality.——The visiting justices of Preston, Lancashire, understanding the roof over their court-house was in an unsound condition, Mr. George Latham, of that town, architect, was appointed to report on the same, with proposals for restoration. The roof was a simple queen roof, supporting a heavy circular dome, and the ends of tie-beams were much decayed with dry-rot. The visiting justices determined on having a new roof, for the purpose of improving the light and sound. Designs were sought by private competition, and Mr. Latham's plan was selected. It consists of an oblong lantern of 32 lights round court, and fixed on braced principals of iron tensions, and abridgment with pannelled coved ceiling springing off walls, and top of lantern ceiling coved, and divided into panels for painting. The contractors are Mr. R. Aughton, Jun., timber work, and Mr. John Whitehead, iron-work; the whole will cost 1,000*l.*——A motion

was brought forward in the Leeds town council lately to the effect, "That the council do erect a suitable town-hall, and that a premium of 100*l.* be given for the best design, on the understanding that the cost shall not exceed 20,000*l.*" It seemed to be thought desirable, however, that the burgesses should be afforded an opportunity of expressing their opinion on the question at the elections in November next, and the motion was postponed. Mr. Ald. Bower said he thought that Mr. Eddison wanted 10,000*l.* for ornament. He (Mr. Bower), on the contrary, would have a good plain building, for use and not for show, and he thought that 10,000*l.* would be sufficient to provide such a building.——The Houghton-le-Spring Catholic Church has been re-opened, after having been additionally decorated.——The "Tate Testimonial" Free Grammar School at Richmond, in Yorkshire, Mr. Andrews, of York, architect, was formally opened on the 27th ult.

ENLIGHTENMENT ON GAS LIGHTING.

The price of gas at Gosport has been reduced to 6s. 6d. the 1,000 cubic feet, with the privilege of using meters belonging to the company on payment of 6d. additional,—the crude beginnings of a system which will yet be generally adopted in promoting the domestic use of gas, and that at a very small per centage on a much more moderate price.——The Winchester Company have reduced their price to 7s., in the expressed hope of realizing such an increase of consumption as will yield them 5 per cent. profit, when they will further reduce the price.——The directors of the Ampthill Gas and Coke Company, in a recent report, "impress upon the shareholders the expediency of reducing the price of gas from 10s. per 1,000 cubic feet to 7s. 6d., feeling convinced that the increased consumption will more than compensate for the reduction in price. They also suggest that a per centage should be allowed to large consumers in addition."——"The Bury company," says the *Manchester Spectator*, "have decided to make a reduction in the price charged for gas. Some time ago, the price to parties whose annual gas rent was under 20*l.*, was 7s. per 1,000 feet. A gas consumers' association was formed, and shortly after the price was reduced to 6s. 3d. A further reduction of 9d. has been decided on; so that, in future, the charge will be only 5s. 6d. to rents under 30*l.* Those whose rent is 160*l.* will be charged 4s. 8d. only." A stupid system of charges with discounts running up to 30 per cent. on the nominal price, prevailed at Bury, as elsewhere, and repeatedly exposed by us: a change is now to be made in respect to discounts.——The Manager of the Salford Gas Works, which belong to the town, says of these works, in his last report,—"It affords me great satisfaction to be able to report from year to year the increasing value of this establishment, as a source of profit to the corporation. During the last eight years the demand for gas has been steadily on the increase, and the rental has advanced from the sum of 9,470*l.* 16s. 6d. to 14,463*l.* 15s. 11½d., or equal to about 53 per cent., while the scale of charges to consumers has been reduced three times (in all from 8s. to 5s. and 4s. 6d.) For the year ending June 30th, 1850, as compared with the year preceding, the increase in production is 10,564,500 cubic feet, and the increase in rental 364*l.* 7s. 10½d., with a reduction of 1s. per 1,000 cubic feet. There is every prospect of a further increase in consumption of gas during the approaching winter." But so has it ever been, that a steady process of reduction in price has uniformly been accompanied by a more and more flourishing exchequer. The public are thus substantially grateful even for small mercies.——The *Morning Post* reports the results of recent experiments at Vauxhall-gardens, by the Count de Hombres, in the manufacture of gas from water on the principle of Mr. Gillard's invention, which consists in the decomposition of water, by passing a jet of steam over a bed of incandescent charcoal in a retort, the gaseous products of which are hydrogen and carbonic acid gas. The latter being separated by the action of quick-lime in a purifier, the hydrogen, in a state of comparative purity, is inducted to a gas-holder for use, to which end, as regards the lighting, the inventor has had recourse to the same experiment by which the intense light used in the oxyhydrogen microscopes is obtained. Pure hydrogen alone, with an unsteady flame, emits great heat. For lighting, Mr. Gillard has invented an apparatus of platinum wire, fitted to the burner, by which the flame is converted into a column of intensely white light; and, with a brass chimney, a steady light is produced, without smell or smoke. The experiments made at Vauxhall, under disadvantageous circumstances, are reported to have been completely successful. The invention, it is said, has been in action for a considerable time in Manchester, and has given universal satisfaction. Count de Hombres stated with confidence that gas could be manufactured *at fourpence the thousand cubic feet!* and that the cost of the platinum would make but a very inconsiderable addition to the charge, as its waste under such circumstances, if any, is so extremely slow that apparatus five years in use at Paris remains apparently perfect as put up.——Mr. H. Carter, Thirza-place, Old Kent-road, has patented some alleged improvements in burners, "consisting of more than one ring or sheet of flame, combined with a suitable chimney or chimneys, and supplied with atmospheric air, particularly adapted to ventilation." Concentric gas-burners have hitherto, he says, been generally constructed without due regard for the admission of that quantity of air only between the rings of flame which is requisite to ensure perfect combustion of the gas. The patentee also claims a mode of illuminating by cut-glass chandeliers enveloping and surrounding jets of flame, and a mode of ventilating apartments by means of gas burners.

ELECTRO-TELEGRAPHIC PROGRESS.

An improvement in electro-chemical telegraphs has been recently patented in America by Messrs. Westbrook and Rogers, who claim "the recording of telegraphic signs on the surface of a revolving *metallic* cylinder, plate, or other equivalent surface, by means of an acidulated liquid or saline solution, or water, held between the point of the wire conductor, and the metallic recording surface, by means of a non-conducting porous substance contained in a glass, or other non-conducting reservoir, in which the recording fluid is contained, by which the use of every description of paper is dispensed with, thereby saving great expense in telegraphing."——Another American patent of a Mr. G. H. Horn claims a "new or improved electro-caustic telegraph, or application, to telegraphic purposes, of heat generated by electric apparatus, or a current or currents of electricity passed through a fine platinum wire, or other proper conductors or equivalents therefor, the marks produced in or through the paper, or other material used in connection with the heated wire, being regulated in their length and number, so as to be characters or expressions of letters, figures, or words."——The first general meeting of the proprietors of the Anglo-French Company for carrying out submarine telegraphic communication between this country and the continent, was held on Tuesday week at Paris, Sir James Carmichael in the chair. The report stated that printed communications, the original slips of which were now in the possession of the President of the Republic, had been telegraphed between coast and coast on 28th ult. thus securing the concession of the undertaking. The wire was purely for an experimental purpose. The directors had since opened negociations with parties in Paris and London, having in view the complete formation of the company with a capital of 50,000*l.* Mr. C. J. Wollaston, C.E. produced specimens of the proposed permanent wire, which he stated would be of sufficient strength to resist almost any species of oceanic accident, whether from rocks, drifts, anchorage, or otherwise. Mr. F. Edwards, one of the directors, also alluded to the privileges the company enjoyed under the concession of exclusive telegraphic communication between France and England for ten years. Resolutions were passed adopting the report. Experiments are being made at Dover with the new cable, in which there will be four wires. The cables, 4 or 5 inches thick, of gutta percha enclosed in wire rope, all chemically prepared, will cost 40,000*l.* Patents are secured for England, France, and Belgium. There will be two of these cables, each 20 miles long, and 3 miles apart, the whole weight representing 400 tons; and it is expected, that when chained down at the bottom of the sea, they will resist the anchor of a 120-gun ship. The whole of the permanent wires and works will be completed by May next, when it is proposed that H.R.H. Prince Albert and the Duke of Wellington shall open the communication on this side the Channel, and the President of the Republic on the other.——Within the last four months, no less than 1,000 miles of telegraph have been opened in the Austrian empire, making the total mileage about 2,000 miles, of which about one-quarter has the wires laid underground. Another 1,000 miles will be ready by next year. The telegraph now works from Cracow to Trieste, 700 miles. On 1st instant, the new telegraph union between Austria, Prussia, Saxony, and Bavaria came into operation, under a uniform tariff one-half the former charges.——Negociations are being entered into with the Government authorities, it is said, for the establishment of the projected sub-marine telegraph across St. George's Channel. Preliminary surveys have been made, and the way is said to be comparatively free from rocks and shoals. Notice of intention to apply to Parliament next session for authorisation to lay down the line will be given. At present two telegraphic routes are proposed; the one of 64 miles across the channel, from Holyhead to Kingston and Dublin, and thence by the Great Southern and Western Railway on to Cork and Galway—the other from St. David's Head, on the Welsh coast, and on to Wexford, Waterford, and the extreme western points of Ireland to Berehaven and Crookhaven, the latter being the last points touched at by vessels outward-bound for the Atlantic.——Telegraphic communication is to be established between Dublin and Galway, the Midland Great Western Railway Company having ordered their engineer to lay down the wires to anticipate the laying down of the intended telegraph across the channel, thereby connecting London with Galway.

ARCHITECTURAL AND ENGINEERING NOTES, IN IRELAND.

Additions are being made to the Roman Catholic Church of St. Peter, at Phibsborough, county Dublin, under Mr. Bourke, architect: they consist of an extension of the present nave 19 feet, and the addition of an entirely new front 43 feet in width. In the centre is a tower 10 feet square inside, with walls 3 feet 9 inches thick: at the angles on the front and side of the tower, parallel with the face of the wall, are buttresses 4 feet wide, and 55 feet 9 inches high, surmounted by pinnacles. The upper length of buttresses have panels, and are chamfered on the arrises: wings at each side of the tower, to have castellated parapets, are about 12 feet 6 inches wide, and have buttresses at the angles, similar in character to those of tower, but are only to be carried to a height of 41 feet, and surmounted by pinnacles. Total height to top of castellated parapet of tower, from ground line, 79 feet; to top of spire, 133 feet 6 inches; windows 2 feet wide by 8 feet high, in sides of tower on principal story. All the new walls are being constructed of broken joint ashlar; the dressings of punched and drafted work. The style is Gothic. Total cost, 2,000*l.* Mr. James Donnelly, builder.

The Commissioners of Public Works have advertised for proposals for erecting a new bridge at Drumgoolestown, county Louth.

The piers for the metal bridge across Lough Athalia, on the Midland Great Western Railway, are almost completed. Mr. George W. Hemans is the engineer to the company.

The Ecclesiastical Commissioners are about rebuilding the church of St. John, Limerick, according to plans by their architect, and have advertised for tenders for same.

A new Roman Catholic Church is being erected at Hilltown, parish of Clonuffe, and is to be consecrated on the 6th of October.

Mr. Dargan, the railway contractor, has

commenced operations beyond the Tipperary junction, in laying down the earth works, in which the rails are to be placed, for the extension of the line from Limerick to Pilltown, which is within about nine miles from Waterford. The roadway only is to be constructed by Mr. Dargan. The rails are to be set by the company's own workmen. The time allotted for the completion of the *works* is one year and a-half. The nature of the soil through which the railway is to pass being advantageous, it is expected that Mr. Dargan will have his portion of the works finished in a short time. The entire expenditure will probably be about 400,000*l.*

NEW STREET THROUGH LONDON WITH AQUEDUCT SEWER.*

Mr. Beardmore suggests, in a pamphlet recently published, that the drainage of the whole metropolis north of the Thames might be effected by a great sewer running from Wormwood Scrubs and the extreme west of London, through Kensington-gore and the Green-park, King-street St. James's, Trafalgar-square, the Strand, and Fleet-street, whence it would deviate to the South of Ludgate-hill, by Salisbury-square, St. Bride's Church, New Cannon-street, King William Statue, East Cheap, Great Alie-street, and the Commercial-road, onwards by Stepney Church, Bow Common, Bromley, and Plaistow, to the Thames at Barking-creek. Concurrently with the improvement of the drainage, he proposes to relieve the traffic by opening up a great line of thoroughfare made up chiefly of streets already running in the line of the proposed sewer. The sewage of the lower districts north of the Thames he proposes to collect and raise by engine-power into the great sewer. The cost of the whole he estimates at 1,500,000*l.*, including 500,000*l.* for the completion of the line of street. The sewer would be about 12 feet in diameter from Charing-cross downwards, and the total length about 15 miles, in nine of which from the head downwards the fall would be at the rate of 8 inches a mile, and that of the aqueduct or remaining portion at the rate of 28 inches a mile. Mr. Beardmore also proposes, for further improvement of the traffic, to form two bridges instead of Westminster-bridge—one at Scotland-yard or Charing-cross, and the other at Pimlico, removing the bridge at Westminster. This he thinks the less objectionable, considering the general connexion of the Westminster side, near the bridge, with the Houses of Parliament, courts of law, &c., all on the same side. By approaches connected with Victoria-street, the Pimlico-bridge, he observes, would relieve the traffic between Belgravia and its vicinity, and the city, by diverting it from the Strand, and carrying it across the southern districts direct between the two extremes.

Books.

Details of Gothic Architecture, measured and drawn from existing Examples. By James K. Colling, Architect. Part I. London: Bogue, 1850.

The author of the "Gothic Ornaments" has been encouraged to undertake the publication of another work of somewhat similar character. The "Details of Gothic Architecture," are to consist of a series of plates, showing, on as large a scale as possible, such features of the remains of English Ecclesiastical Architecture as have not been published or fully developed in other works of the same character. It is intended to illustrate, mostly, moulded and traceried work, rather than the foliated and sculptured; so that the work will form a companion to the "Gothic Ornaments," and a continuation of "The Analysis of Gothic Architecture." It is to be hoped that Mr. Colling will adhere to the promise to give only those specimens that have not been published, and that these be *good*.

We should not care, then, if this were the last book of the sort.

The work will be published in monthly parts, each containing five plates, and is to be completed in about thirty-eight parts.

* Suggestions for a New Street through London, with a leading Aqueduct Sewer: also Remarks on the Metropolitan Bridges: with Map and Section. By Nathaniel Beardmore, C.E. &c. Waterlow, Parliament-street; and Weale, High Holborn.

Miscellanea.

Socialist Strikes in France.—An extensive confederation, or conspiracy, has been recently discovered, if not broken up, at Paris and in the French provinces, in which strikes have been instigated, it is said, by a deliberate resolution to ruin the manufacturers and capitalists, and realize the system of universal Socialism, in conformity with the theories of the Luxembourg in the first days of the revolution of February. The fraternity had a fund of 50,000f., ascertained to have been in their possession for propagandist and auxiliary purposes. Foremen were formally tried and convicted at their councils, and in one case eight foremen, "for attending too much to the interests of their employers," were sentenced to two years' suspension from employment (!), and perpetual incapacity for the rank of foremen in any establishment,—a sentence executed, it is said, to the letter. Workmen are, or have been, distributed by this association, amongst different establishments, for the express purpose of inoculating other workmen with the virus; and it seems at least to be questionable whether the conspiracy be even yet either fully laid open or broken up. The masters, in some cases, have met the rules of the association as to wages per day, fixed at 6f., without reference to either quantity or quality of work, by a counter resolution to employ workmen only on piecework. The contrast between those causes which appear to foster "savage Socialism," as *L'Ordre* calls it, amongst the French, and the repressive influences by which its sting is blunted, and its poison neutralized, amongst ourselves, is thus drawn (over-drawn a little it may be) by the Parisian paper just named, in remarks on Lamartine's recent impressions of English order and law:—"M. de Lamartine has just seen a nation great by the security of its laws, great by labour, great by manufactures, and which knew how to realize important reforms in the interest of the masses, and so prevent the breaking out of one of those catastrophes which profoundly trouble nations, and more frequently leave behind them ruins, blood, and regrets, than veritable ameliorations. The picture he draws of the magnificent undertakings of civilization, and of the multiplied and intelligent efforts of the rich or well-to-do of London to relieve all wants, to lessen sufferings, and relieve misery, by the aid of innumerable associations, which, in their infinite variety, appear to respond to all the calculations of human foresight—this immense picture, we say, is offered to the meditations of our country, to teach it how the work of a humane, peaceful, conservative Socialism may prevent the ravages of excessive, savage Socialism, which always announces re-edifications, and begins by causing ruins."

The Manchester Designers and the International Exhibition.—At a recent meeting, the Manchester designers resolved to contribute to the exhibition, and appointed a committee to promote the end in view. Mr. J. A. Hammersley, the head-master of the Manchester School of Design, stated at the meeting that the commissioners, in reply to a question suggested by him, had expressed a desire to have drawings from the designers of Manchester, of as high a class as they could produce,—higher than commercial requirements would demand, or than the facilities of the machines could accomplish. Mr. Hammersley suggested that there should be two classes of contributions, one consisting of patterns capable of being practically applied at present, and another of a higher class, which might not now be considered as practicable. He did not believe that there would be any limit to the number of colours in design sent to the exhibition; but he thought that as much high art, in form, could be displayed in two-coloured as in ten-coloured patterns. Mr. Hammersley explained that there was an express order of the commissioners that the designers' names should be attached to their designs.

Colosseum.—The Panorama of Paris which has been so attractive, is about shortly to be removed, to be replaced by another picture by Danson and Sons, and which is now in a state of great forwardness. We have before this recommended a visit to this extraordinary work of art.

Bury Athenæum.—The foundation-stone of this new edifice was laid by Lord Stanley on 3rd inst. It is to be erected in the Italian Doric style, in stone from Lord Derby's quarries near the town, and at a cost of 4,000*l.*, from a design by Mr. Sidney Smirke. The earl has presented the site as well as the stone. Lord Stanley delivered an appropriate address, in which he said that, amongst many other advantages, there was a great and prominent one in institutions such as this; it brings together in one common, one rational, one laudable pursuit, classes of society who, but for institutions of this kind, would see little of, and feel little for, each other, and have little feeling and sympathy in connection. It brings together classes of men whose pursuits in life are widely different, whose occupations are widely distinct, whose sphere of action is wholly separate, and impresses upon them practically the conviction that from the highest to the lowest we are all rational, intellectual, responsible beings, all endowed with higher faculties than those which tend to the mere attainment of earthly good, or the mere acquisition and support of bodily comfort: it leads us all to feel, moreover, that we are members of one common family,—the great human family,—bound together in one great communion and fellowship. We shall revert to the building.

Railway Jottings.—The London and North-Western directors have chosen a site for their new station at Chester, near to the city walls, and have ordered plans adapted to the site chosen, for a station for goods and minerals as well as passengers. The estimates for the passenger station are ordered for a plain building of white stone.——The low fares on the Sheffield and Rotherham line continue to yield a larger return than double the amount before yielded.——The Railway Commissioners state, it is said, in a letter to a gentleman in Newcastle, that they have had the Ouseburn viaduct of the York, Newcastle, and Berwick (North Shields) Railway, "inspected by one of their officers, who has reported that the feeling of insecurity referred to might have arisen from the slight construction of the permanent way, which has since been changed and a heavier description of permanent way substituted." The Commissioners add:—"The inspecting officer sees no reason to believe that the structure in question, in its present condition, is insecure."——On the Drumlanrig contract of the Nithsdale line the viaducts of Carron and Enterkin are completed.——A Glasgow paper complains of the mean accommodation at Coatbridge, "the best paying station short of Edinburgh and Glasgow" on that line of route.

Proposed New Street in the City.—A numerous meeting of the inhabitants of Tower Ward has been considering a plan for a new street from the south side of the Corn Exchange, Mark-lane, to Tower-hill, traversing the site of the recent conflagration. A different plan for improving that locality was under consideration in 1846. The meeting, however, merely adopted a resolution, to the effect that the increasing traffic through the principal streets of the ward required immediate attention, and suggesting to the Commissioners of Metropolitan Improvements the widening of Mark-lane nearest to Great Tower-street. A separate resolution presses on the attention of the Improvement Committee that the widening of the end of Mark-lane, by the removal of three or four dilapidated houses, should be proceeded with at once.

Liverpool Architectural Society.—The opening meeting of the above society was held on Wednesday evening in last week, at the Royal Institution, the president of the society, Mr. Picton, F.S.A., in the chair. After some account being given of the society's last summer excursion, a paper entitled, "The Genealogy of Architecture and the Fine Arts," by Mr. Samuel Huggins, was read.

Blasting Seaford Cliff.—The necessity for fixing the sea-wall formed by the dislodgement, as pointed out by us in our notice of the operation, is becoming evident. We are told that the late high tide has already washed away a considerable portion of the chalk forced into the sea by the explosion; and that unless something be done to prevent further inroads of the sea upon the mound, the effect which was sought to be established is likely to be lost.

Staircases—A Caution.—It is now ten weeks since a friend, when lighting me down the staircase of his house, incautiously ran forward to place the light upon a slab in the passage, leaving me in the shade. I proceeded with my hand upon the rail, and when I reached the newel, naturally concluded that I had but one step more to descend. It was not so: there was one additional tread beyond the newel. Unprepared for this, in stepping forward I strained all the back muscles of my leg so severely as not to have been able to quit my house since, and have the probable prospect of remaining within doors several weeks more. A subsequent injury has, I am informed, occurred at the same place, but providentially the sufferer was confined only four days. In the course of this week, the surgeon who attends me was at a house, and the lady, anxious to see that he was in comfort, proceeded down stairs with a light. It was extinguished by a gust, and the newel of the rail being one step short of the actual termination of the stairs, she fell, and her arm was broken. May I ask you to warn architects and builders against the extreme danger attendant upon such a very common practice? I cannot yet be assured that I have not been rendered lame for the remainder of my life; and as, in the third instance, the sufferer is an elderly woman, it may terminate her existence.—R. K.

Lambeth Parish Church.—At a vestry meeting, on Tuesday, Mr. Churchwarden Taylor drew attention to the subject of the repair and restoration of the church, by voluntary subscriptions. It was proposed to case the building with stone, similar to the tower, to make a new roof of lighter construction, and with a view to better ventilation, and, in fact, to restore the church to its original state. Under the proposed plan, upwards of 200 more sittings would be appropriated to the poorer classes. He was happy to say that many Dissenters had already liberally contributed. The gross estimate was 6,574*l.* He moved that the plans and specifications of Mr. P. C. Hardwick be sanctioned and approved. Mr. Taylor stated that there was no power to make a church-rate. Mr. Bushell moved an amendment. Mr. Taylor said the churchwardens had already received, from the rector, 100*l.*; Archbishop of Canterbury, 100*l.*; London and Westminster Bank, 100 guineas. The original resolution was carried by a majority of 42 to 1.

The Marble Arch.—Will you permit me to inquire of you, whether, among the many suggestions which have been offered as to the site of the Marble Arch lately taken from St. James's-park, the situation at the entrance to the Avenue in the Regent's-park has been named? This ornamental walk is now growing into importance and beauty: its length and public accommodation merit a suitable entrance, and although I do not greatly admire the structure I refer to, it is adapted, as to its magnitude, to the place which I have mentioned, where there is nothing to obstruct its being well viewed, and the trees and verdure near it will act as reliefs to the eye in contrast with its colour.—John White, D.S., St. Marylebone.

*** Such a suggestion has been made in our pages.

Macadam in Paris.—"The mud produced on the macadamised part of the Boulevards is (says the *Moniteur du Soir*) to be turned to account. A person, named Taboureau, has obtained permission to carry it away for the purpose, after having had it carefully washed and sifted, of having the silicious particles made into bricks to clean knives with. A hectolitre of the mud produces ten bricks, which are sold at 20c. each, and so give 2f. for each hectolitre. It is said that a good workman can earn 20f. a day by this new kind of industry."

Something to be built at Pinner.—The sum of 45,000*l.* in money and land has been assigned by Miss Howard, of York-place, for the following uses:—To erect twenty-one houses on her property at Pinner, near Harrow, in the form of a crescent; the centre house for the trustees; the other twenty houses for the sole use of twenty widows, who are to occupy them free of rent, and to receive also 50*l.* a-year, or more if the fund will allow. The trustees appointed are the Earl of Fingall, and Mr. W. A. Mackinnon, M.P.

Clay for Industrial Purposes.—Your allusion to clays for pottery manufactures, in an article in your journal, entitled, "The International Exhibition," reminds me of some specimens of that material which I have seen in the neighbourhood of Billericay, in Essex, and to which I would call the attention of your readers living in, or acquainted with, that locality. The clay is of the palest yellow tint, and of exceedingly fine texture, and would, I think, with an admixture of silica, or pulverised flint, produce very good earthenware of the commoner sort. In its pure state it is not fit for exposure to the weather, though it is susceptible of a polish, as may be seen in some of the dressings and fence-wall-copings of the Billericay Union Workhouse. The red clay of Essex is also of very fine quality, and many windows of the sixteenth century have their tracery executed in it. A specimen was exhibited at the Architectural Exhibition this year.—W. S.

Harmless Paints.—Amongst the recent American patents is one by Messrs. Leclaire and Barrnel, the object of which is set forth to be a complete reform in the art of painting, by substituting unalterable and harmless paints for those having lead and copper, which are poisonous substances, for a basis, and which are liable to speedy alteration, and never produce perfectly clear tints. This reform is effected by the discovery of methods of obtaining on a large scale the white and yellow of zinc and barytes, zinc green, and antimonial red, which products, used as such, or combined with other harmless and unalterable colours employed in painting, form a complete scale of colours, with all the intermediate grades.

Another Carpet for the '51 Exhibition.—Having noticed Mrs. Purcell's proposition for a carpet to be worked by ladies of England for the International Exhibition, we have been asked to mention another which is in progress for the same purpose, under the patronage (as it is called) of the Lady Mayoress. It was designed by Mr. J. W. Papworth, and the patterns were made by Mr. W. B. Simpson. It is to be 30 feet long, 20 feet wide, and to consist of 150 squares. We happen to know the *work* of half the fair damsels who have taken upon themselves the responsibility of the squares already appropriated, and have not the least doubt that the carpet will be as correct as their lives, as strong as their good intentions, and as varied as their accomplishments. Of the time that is wasted over Berlin wool it would be ungenerous to speak just now, when it is about to be applied to a special purpose, but there are some to whom a little advice on this subject might be useful. There is something else to be done in this world besides counting "two to the right and four to the left." We must wind up, however, or it will be said we are wool-gathering.

Slate-dressing Apparatus.—A patent has been taken out by Mr. Nathaniel Mathews, of Wern, Tremadoc, Carnarvon, quarry proprietor, for an apparatus for cutting or dressing slates into various shapes and sizes. This machine may be employed to cut fancy slates, by having cutters of the required form, and when actuated otherwise than by hand labour, an eccentric and fast and loose pulley may be used to actuate the cutter.—*Mechanics' Magazine.*

Dr. Arnott's Pump for Ventilation.—We examined, the other day, at Mr. Bailey's, Holborn, a pump, on a novel construction, which has just been completed, for forcing pure air into the new County Hospital at York, but are compelled, by want of space, to postpone a notice of it. Dr. Arnott assisted to explain it, and Sir Thomas Deane, Dr. Ure, Mr. Donaldson, Mr. Fowler, Mr. Laxton, and various other gentlemen interested in the question, were present.

Architecture at University College.—The lectures on architecture and construction at University College, for the ensuing session, will commence on Tuesday, the 15th inst. Professor Donaldson sets forth the following as the results sought to be produced by them:—"A systematic comprehension of the subject; a methodical mode of thinking and reasoning on the various matters considered; an interest in each branch of the science and art by illustrating precept by example, the laws by their application; a review of the history and styles of art, and of the best monuments of every period; an acquaintance with the eminent architects of each epoch, and with their works; a general perception of the laws of taste; a knowledge of the principles of construction; a practical view of the varieties and properties of materials and their peculiar and most economical application; and an examination and comparison of the mechanical contrivances available in construction."

Foreign Tiles.—Some remarkably large importations of roofing tiles and bricks are taking place at the present time from Antwerp, the manufacture of Belgium. One vessel, the *Active*, from Antwerp, has brought 27,612 roofing tiles, and 6,000 bricks; another, also from Antwerp, has brought 27,000 roofing tiles, 4,000 paving tiles, and 3,000 bricks.

First Use of Paper-Hangings.—It was on the walls of this drawing-room, the king's at Kensington-palace, that the then new art of paper-hangings, in imitation of the old velvet flock, was displayed with an effect that soon led to the adoption of so cheap and elegant a manufacture in preference to the original material from which it was copied.—*Notes and Queries.*

Surveyorship, St. James's, Clerkenwell.—This office (which comprises the *surveillance* of Pentonville, &c.) becoming vacant, *seventeen* candidates came forward. Six were selected, viz. Messrs. Finlay, W. P. Griffith, W. Lovell (district surveyor of Stoke Newington), Arthur Taylor, Josiah Houle, and W. F. East. After a poll the numbers were announced to be as follow:—W. Lovell, 13; W. P. Griffith, 10; W. F. East, 9.

Surveyor to the Borough of Bolton, under the Public Health Act.—There have been about thirty applicants for the office, out of whom, in the first instance, a selection was made of six. Eventually Mr. John Smith, of Altrincham, architect and surveyor, was appointed.

Public Conveniences.—I am glad to find that a correspondent has again revived in your pages the necessity of increasing the number of public conveniences. It is true, Mr. Editor, you can claim the merit of from time to time noticing the want; but I cannot help thinking that the public have a right to claim your constant advocacy to remedy the evil. The subject is alone suited to a professional paper, and from the reputation of The Builder, the public hope to receive from such a source a plan whereby, not only in point of number, they may be made fully sufficient even for the visiters of the year '51; but also some plan by which the existing places may be made wholesome and not be allowed to emit poisonous evaporations that render the contiguity of a urinal a loss of 25 per cent. to the owner of the adjoining property. Decency and comfort require that this subject should not be left to private individuals to erect any sort of York-stone or cement contrivance, but rather that the different paving-boards or parish authorities be compelled to erect a sufficient number, and keep them in proper repair.—B.

*** We have several plans before us, but have not determined on publishing them.

Photographic Improvement.—The *Boston Transcript* states, that a Mr. Howes of that city has discovered a means by which a miniature-sized daguerreotype may be magnified to life size, or larger, if necessary, and reflected upon a canvass, or any flat prepared surface, so that an artist may seat himself before it and paint it as it appears.

To render Stone impervious to wet.—The recipe adopted by Mr. Sylvester was used some years ago on one of the public buildings in Oxford. The architect can probably speak as to its success. I believe the process may be much simplified by using soft soap, which dissolves in *cold* water: the quantity depends on the texture of the stone: the saturation of alum may be used as soon as the soap water has dried off, and should produce a coat impervious to cold or hot water.—X.

TENDERS

For five Fourth-rate Houses and an intended Public House in the Fairfield-road, Bow. The quantities supplied. Mr. Wm. Dobson, Architect.

Turnvill	£3,040
Messrs. Curtis	2,844
Hill	2,774
Crook	2,687
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TO CORRESPONDENTS.

"Æcus" (iron bars and iron-plate lining to shutters. Rutter's "Electric Indicator" would give confidence to a nervous person in a lone house), "G. F." declined with thanks), "E. B.," "J. J. L." ("Instance of Dry-rot" we printed long ago), "Y.," "C. M.," "A. D.," "S. L." (shall hear from us), "P. H. G.," "J. H.," "Londinensis," "J. P." (a list might doubtless be obtained at Gwydyr House, Whitehall), "W. Y.," "J. K. C.," "P. P.," "Lady C.," "J. T.," "J. B. R.," "S. S.," "T. F. F.;" "New Elements of Geometry," by Sebor Smith. London: Bentley, 1850.

"*Books and Addresses.*"—We have not time to point out books or find addresses.

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III. FORMS of SALUTATION.
IV. SIBERIA and CALIFORNIA.
V. MURE on the LITERATURE of GREECE.
VI. METROPOLITAN WATER SUPPLY.
VII. ANECDOTES of the PROVISIONAL GOVERNMENT.
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IV. MURE'S CRITICAL HISTORY OF THE LANGUAGE AND LITERATURE OF ANCIENT GREECE.
V. COL. CHESNEY'S EXPEDITION TO THE EUPHRATES AND TIGRIS.
VI. RECENT CLASSICAL ROMANCES.
VII. EMIGRATION AND INDUSTRIAL SCHOOLS.
VIII. DIFFICULTIES OF REPUBLICAN FRANCE.
IX. HORACE AND TASSO.

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LECTURES.—SESSION 1850-51.

The following is the Course of Lectures on Thursday Evenings, commencing at Eight o'clock:—

Robert Hunt, Esq., author of "Poetry of Science," &c.—Three on "The Practical Applications of Abstract Science."

A. B. Stevens, Esq.—One on "The Wars of the Scotch Covenanters." (Honorary.)

R. D. Grainger, Esq., F.R.S.—Two on "The Laws of Sensation, the Functions of the Brain, and the Actions of the External Senses." (Honorary.)

Charles R. Weld, Esq., Secretary to the Royal Society.—One on "The Arctic Expeditions," with illustrations.

George Dawson, Esq., M.A.—Three on "The Mythology of Nations."

George Grossmith, Esq.—One on "The Writings of Charles Dickens."

Gideon Algernon Mantell, Esq., LL.D., F.R.S.—Two on "Coral and Coral Islands," and on "Petrifactions and their 'Teachings.'"

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Charles Cowden Clarke, Esq.—Three on "Ancient Ballads," on "Chaucer," and on the "Burlesque Writers of England."

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Dr. Cantor.—One on "Sleep and Dreaming."

Thomas L. Donaldson, Esq., Professor of Architecture at the London University College.—Two on "The Sacred and Civil Edifices of Ancient and Mediæval Times."

Mrs. Clara L. Balfour.—Two on "The English Female Poets of the Present Century."

E. A. Creasey, Esq., Professor of History at London University College.—Three on "Unsuccessful Great Men."

Thomas Rymer Jones, Esq., Professor of Comparative Anatomy at King's College.—Two on "The Curiosities of Natural History."

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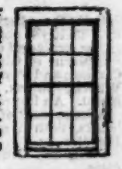

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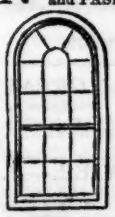

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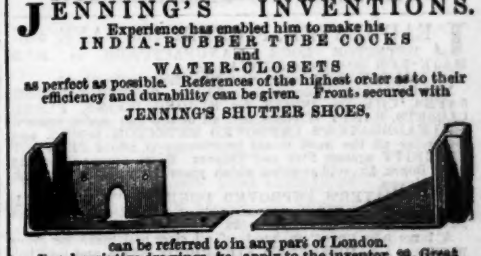

can be referred to in any part of London.

For descriptive drawings, &c., apply to the inventor, 29, Great Charlotte-street, Blackfriars-road.

PATENT GALVANIZED IRON, Plain or Corrugated, for ROOFS, HOUSES, &c. Wholesale, Retail, and for Export.

Apply to TUPPER and CARR,
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Patent Galvanized Iron Guttering,
Water or Gas-pipes, Hooping, Wire, &c.
*** An allowance to the trade.

IRON BUILDING and ROOFING WORKS,
BIRMINGHAM, late of Southwark.
JOHN H. PORTER,

Manufacturer of the Corrugated and other kinds of Iron Roofing for railway stations, carriage sheds, farm buildings, gas-works, warehouses, factories, &c. &c.

PATENTEE
Of the Corrugated Iron Beams, Girders, and Fire-proof Floors.

THE PATENT GALVANIZING and CORRUGATING IRON COMPANY, Glasshouse-yard, opposite the principal entrance to the London Docks—Offices 12, Circus, Minories, London. J. SYMONDS and Co. Managers. The proprietors have brought Galvanizing and Corrugating to great perfection, and the facilities they possess in executing orders to any extent induce them to solicit the favours of contractors, builders, and others, assuring them that all orders intrusted to their care shall be executed in a superior manner, and with the utmost despatch. On hand, for exportation or home consumption, galvanised plain and corrugated sheets for iron houses, roofing, &c. iron guttering, water and gas pipes, hooping, and wire of all sizes.
*** A Discount allowed to the trade.

TO BUILDERS AND OTHERS.

A QUANTITY of RAILING BARS to be SOLD, at 6l. per ton, and some BALCONY PANELS, at 8l. per ton, at J. JONES'S Iron Wharf; also a large stock of Rain-water Pipes, Gutters, Sash-weights, Coal-plates, Scrapers, Tile-lights, Barrow-wheels, Stable-fittings, &c. &c., at the same low prices. J. JONES, Iron Merchant, Iron Bridge Wharf, No. 6, Bankside, London, near the Southwark Iron Bridge. Prices forwarded on application.

IRON FOUNDRY, 80, Goswell-street (late of Brick-lane, St. Luke's).—J. J. JONES having made great additions to his STOCK of PATTERNS, begs to inform the Trade, that he can now supply them with Plain and Ornamental Iron Columns, Girders, Railings, Gates, Iron Coping, Balconies, Window Guards, Verandahs, Ornamental Staircase Panels, Iron Staircases, Tomb Enclosures, Trellis Panelling, Lamp and other Brackets, Cantilevers, Newel Bars, Water Closet Work, Area Gratings, Fly and other Wheels, Wheel Plates, &c.
BAKERS' OVEN WORK, Forge Backs and Troughs, Rain Water Pipes and Gutters, Sash Weights, Furnace Bars, Stoves, Ranges, &c., always in stock.

FOUNDRY AND IRONWORKS,
1'8, DRURY-LANE, and CHARLES-STREET, DRURY-LANE
GLOVER, BROS.,

Solicit the attention of the Trade to their extensive Stock of PATTERNS for CASTINGS of EVERY DESCRIPTION, either structural or ornamental.
Patterns of Girders, Columns, Balconies, Railing, Ornamental Carriage and Park Gates, Lamp and Street Posts, Tanks, Pipes, Wheels, Pinions, Lathes, and Steam-engines; Range and Hot-plate Metal. An improved Soot Door adapted for internal work.
A large stock of Rain-water Pipes, Plain and O G Gutters, Air-bricks, Sash Weights, Air-tight Sewer Grates, Stable Fittings, Hurdles, &c.
Plain and Ornamental Vases 20 per cent. cheaper than Terra-cotta.
Estimates given for Iron Buildings, Wrought-iron Roofing, Greenhouses, Staircases, Wrought-iron Girders, Fireproof Doors, Book Safes and Strong Rooms, Tanks and Boilers and every description of ironwork to specification, and the work executed with every attention to quality and despatch.
GLOVERS' IRONWORKS,
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PROTECTION from FIRE, and GREAT ECONOMY in BUILDING.—A pamphlet, descriptive of the method by which both these important objects are secured, may be obtained on application to Messrs. FOX and BARRETT, 46, Leicester-square.

WARMING BY HOT WATER.—J. WEEKS and Co., KING'S-ROAD, CHELSEA, solicit the honour of Architects to inspect their Hot-Water Apparatus, which is to be seen on their premises, in extensive operation. Ornamental Pedestals and Stacks of Pipes in great variety, applicable for warming churches, mansions, entrance-halls, offices, conservatories, &c.—TUBULAR BOILERS of all sizes, warranted to be the most efficient and economical of any yet introduced.—J. WEEKS and Co., Hot-Water Apparatus Manufacturers, King's-road, Chelsea.

WARMING.—HOT-WATER APPARATUS, with improved boilers, requiring no brickwork, and arranged to continue in action from twelve to sixteen hours without attention; adapted for churches, chapels, conservatories, and every description of building, supplied and erected on the most reasonable terms. Also, the THERMANTERION, an apparatus which warms without injuring the air, and recommends itself on account of its simplicity, durability, efficiency, and economy: especially adapted for churches, chapels, halls, or buildings only used occasionally.—Apply to SPILLER and TAYLER, Engineers, Battersea.

DEFRIES' PATENT GAS BATH.—By the use of the above, a HOT BATH can be obtained in six minutes for less than twopence. Every family should provide itself with this invaluable requisite, its limited cost placing it within the means of all, and its simplicity within the management of a child.—DEFRIES' ECONOMIC GAS COOKING STOVES are adapted for all establishments, large or small, and need only to be seen to be appreciated for their cleanliness and economy, entirely dispensing with all coal. To be seen daily in operation (Saturday excepted) at 221, Regent-street, and also in action.—Defries' Dry Gas Meter, 40,000 in use. N.B. The apparatus can be applied for all heating purposes.

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CHUBBS' PATENT DETECTOR LOCKS give perfect security from false keys and picklocks, and also detect any attempt to open them. They are made of all sizes, and for every purpose to which locks are applied, and are strong, secure, simple, and durable.
CHUBBS' PATENT LATCH, for front doors, counting-house doors, &c., is simple in construction, low in price, and quite secure. The keys are particularly neat and portable.
CHUBBS' PATENT FIRE-PROOF SAFES, BOOKCASES, CHESTS, &c., made entirely of strong wrought-iron, so as effectually to resist the falling of brick-work, timber, &c., in case of fire, and are also perfectly secure from the attacks of the most skilful burglars.
CHUBBS' CASH and DEED BOXES, fitted with the Detector Locks.
CHUBB and SON, 57, St. Paul's Churchyard, London.

LEADBEATER, FIREPROOF SAFE and DETECTOR LOCK MANUFACTURER to HER MAJESTY'S BOARD of ORDNANCE.
LEADBEATER, many years Manufacturer for Chubb.
LEADBEATER'S strong wrought-iron FIREPROOF BOOK SAFES, CHESTS, DOORS for STRONG ROOMS, PLATE CLOSETS, PARTY WALLS, &c., all of the best make, secured by LEADBEATER'S IMPROVED DETECTOR LOCKS, and possessing all the most recent improvements, afford PERFECT SECURITY against Fire and Thieves. Extra Strong Cash and Deed Boxes, &c., sold at prices which place them within the reach of all classes.
LEADBEATER'S IMPROVED DOUBLE-ACTION COMBINATION LATCHES, for securing street and office doors, cannot be opened by false keys or picklocks.
A large assortment on hand of all sizes and fitted for every purpose at LEADBEATER'S FIREPROOF SAFE and DETECTOR LOCK MANUFACTORY, 125, ALDERSGATE-STREET, CITY, LONDON.—Estimates sent by return of post.
A vacancy for an apprentice—a small premium required.

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HART and SONS, Wholesale and Manufacturing Ironmongers, Nos. 53, 54, and 55, Wych-street, Strand. Established 1819. Proprietors and sole Manufacturers of PITT'S PATENT SELF-ADJUSTING DOOR FURNITURE and SPINDLES, and Manufacturers of Dr. ARNOTT'S VENTILATING CHIMNEY VALVES.
HART and SONS solicit the attention of Builders, House Decorators, Smiths, Bell-hangers, &c. &c. to their extensive and well selected stock of DOOR FURNITURE in every suitable material, *en suite* with finger-plates, bell-pulls, levers, &c., and also to their
LOCKS and LATCHES in mortice, rim, drawback, iron gate, cabinet &c., of all qualities, including Barron's, Bramah's, Chubb's, and Pitt's Patent.—To their
GENERAL IRONMONGERY wrought and cut nails, screws, hinges, bolts, &c. &c
BRASS FOUNDRY—Bell cranks of all descriptions, cornice poles, picture rods, skew door handles, desk and hat rails, window guards, Espagniolette bolts, &c. &c.
WINDOW FITTINGS of all kinds, including brackets, rods, arms, sliding sockets, trays, &c. &c.
DOOR SPRINGS and HINGES, including Redmund's, Smith's, Collinge's, Gerish's, and Cotterell's patents.
WINDOW BLIND FITTINGS of the most approved principle.
LEA'S RACK BOLT MORTICE LOCKS, for which they are AGENTS, as well as for all inventions of merit as soon as perfected.
HART and SONS, aware that the practice of publishing NET price-lists is injurious to the interests of the trade generally, are unwilling to follow it, but at the same time they beg to assure their friends that their prices shall be equally as low as those of any other respectable house.

CHURCH and TURRET BELLS cast to any weight, and tuned. Ship, plantation, house, sheep, cup, and clock bells of any size.

MUSICAL HAND BELLS

Tuned to the chromatic scale, with improved clappers, and pegged on a new system, which gives a superior tone and facility for ringing.

Memorial Brasses, Church Candlesticks and Brackets, &c.

Old Bells recast or taken in exchange.

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BELL FOUNDERS,
ENGINEERS, &c.

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Elliptic Stoves, double backs, 2½d. per inch.
Register Stoves, 5d. 6d. 6½d. 7½d. per inch.
Self-acting Ranges, with circular ovens and back boilers, best wrought bars and bright fittings—
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3-feet Cottage Ranges, with ovens and back boilers, 33s. each.
3-feet self-acting ditto, ditto ..... 35s. each.
Air Bricks, 3s. 6d. per doz.—1-inch Cut Lath Nails, 13s. 6d. per cwt.
Best Patent Cut Clasp.

1½	1¾	2	2½	3 inch and larger,
14s. 6d.	14s.	13s.	12s. 6d.	12s. per cwt.

Best Sheet Floor Brads, 11s. 6d. per cwt.
Best Town Glue, 38s. Ditto, Scotch, 52s. per cwt.
Best Patent Sash Line.

1	2	3	4	5	6
4s.	4s. 6d.	5s. 6d.	7s.	8s.	10s. 6d. per gross.

At F. R. WILLIAMSON'S IRONMONGERY and STOVE WAREHOUSE, 35, Chiswell-street, Finsbury-square.
Lists of Prices had on application at the Warehouse, or by letter pre-paid, inclosing postage stamp.—Warehouse closes at 7 o'clock.

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Register Stoves, 5d. per inch.
3-ft. Self-acting Cottage Ranges, with Oven and Boilers, 36s. each.
3-ft. Self-acting ditto, with wrought bars and bright fittings, 58s. ea.

Cast Rain-water Pipe	2	2½	3 inch.
	8d.	10d.	1s. per yard.
Cast Gutters—4 inch, 8d. per yard.			
O.G. Gutters	4		4½ inch.
	11d.		1s. per yard.
Best Cut Clasp and Rose	1½	1¾	2	2½	3 inch.
	15s.	14s. 6d.	14s.	13s.	12s. 6d. per cwt.

Sheet Floor Brads, 11s. 9d. per cwt.
1-inch Cut Lath, 14s. per cwt. Cast Lath, 9s. 6d.
6-inch 2-Bolt Rim Locks, with Scotch Springs and best Furniture Patent Spindles, 15s. per doz.
6-inch 3-Bolt Bd. Ward Mortice, with best Furniture and Patent Spindles, 2s. 9d.
Light Elliptic and Register Metal, 12s. per cwt.
Hot Water Pipes, 8s. 6d. per cwt.

TO BUILDERS, CABINET-MAKERS, and OTHERS.
Best Cut Sheet Flooring Brads, 11s. 6d. per cwt.
Fine Cut Clasp and Rose.

14s. 6d.	14s. 6d.	13s. 6d.	13s.	12s. 6d. per cwt.
1½	1¾	2	2½	3 inch.

Cross Garnet Hinges, per dozen pair.

8. 9d.	3s. 3d.	4s. 3d.	5s.	6s.	8s.
10	12	14	16	18	20 in.

Best Bright Tower Bolts, per doz.

1s. 3d.	1s. 7d.	2s.	2s. 6d.	2s. 10d.	3s. 3d.	3s. 7d.
3	4	5	6	7	8	9 in.

Iron Rain-water Pipe.

9d.	10d.	1s. 1d.	1s. 5d.	1s. 8d. per yard.
2	2½	3	3½	4 inch.

Best London Glue, 38s. per cwt.
Cast Lath Nails, 10s. per cwt.
Air Bricks, 3s. 6d. per doz.
Hooping for bond, 3l. 10s. per ton.
Sash Weights, 5s. per cwt.
TERMS—NET CASH.
A price-list may be had on application.
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Wholesale Ironmongers, Brass Foundry and Nail Warehouse,
5 and 6, Broad-street, Bloomsbury, London.
AGENTS FOR LEA'S PATENT MORTISE LOCKS AND BOLTS.

TO BUILDERS AND CARPENTERS, &c.

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Best Cut Sheet Flooring Brads, 11s. 6d. per cwt.
Fine Cut Clasp and Rose.

14s. 6d.	14s. 6d.	13s. 6d.	13s.	12s. 6d. per cwt.
1½	1¾	2	2½	3 inch.

Best Bright Tower Bolts.

1s. 3d.	1s. 7d.	2s. 3d.	2s. 6d. per dozen.
3	4	5	6 inch.

Best Patent Sash Line.

4s.	4s. 6d.	5s. 6d.	7s.	8s.	10s. 6d. per gross.
No. 1	2	3	4	5	6

Cast Lath Nails, 10s. per cwt. Sash Weights 5s. per cwt.
Air Bricks, 3s. 6d. per dozen.

DR. ARNOTT'S VENTILATORS.

11 by 8 inches	5s. each.
by 9 "	8s. "

An assortment in Brass, Bronzed, Gilt, &c.

An extensive stock of Mortise Locks, Drawback Locks, Iron Rim Locks, and Latches, of every description, at very reduced prices; also Door Furniture, in china, amber, crystal, ivory, ebony, buffalo, horn, brass, &c., with Finger-plates, Bell-pulls and Levers *en suite*.
B. and Co. are the inventors of SHIFTING BOLT MORTISE LOCKS, &c., so universally approved of.—Established nearly 200 years, for the supply of goods from the best manufactories at the lowest prices.

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Elliptic Stoves, with Double Backs, 2½d. per inch; Register Stoves, 5d. per inch.
3-feet self-acting Cottage Ranges, Oven and Back Boiler, 35s. each.
Cut Sheet Floor Brads, 11s. 6d. per cwt.
Cut Clasp Nails.

15d.	14s. 6d.	14s.	13s.	12s. 6d. cwt.
1½	1¾	2	2½	3 in.

1-inch Cut Lath, 13s. 9d. per cwt.
6-inch 2-bolt Rim Locks, with Scotch Springs, best patent furniture, 14s. 6d. per dozen.
Improved Bow Latches, 6s. 6d. per doz.
HOT WATER APPARATUS for heating greenhouses, &c., on improved principles, being the cheapest heat known.

TO BUILDERS, CARPENTERS, &c.— The undermentioned are the PRESENT PRICES of IRONMONGERY, at YOUNG'S, 194, Oxford-street. Every other article equally low. Orders executed upon receipt of remittance or a respectable London reference.

	2	2½	3	Inches.
Cast Butts	5s. 3d.	7s. 6d.	11s.	per 6 dozens.
Cut Clasp	5d.	7d.	1s. 2d.	1s. 8d. per
	4d.	6d.	10d.	20d. per 1,000.
Nos.	3	4	5	6
Patent Line	6s.	7s. 3d.	9s.	10s. 9d. per gross.
	2	2½	3	Inches.
Rain Pipe	9½d.	10½d.	1s.	1d. per yard.

BATHS.—TYLOR'S IMPROVED APPARATUS, consisting of ENAMELLED MARBLE BATH, COPPER CIRCULATING BOILER, and three-way cock, with index-plate for hot, cold, and waste water, complete. Does not require brickwork, is portable, and in most cases can be supplied ready for use. Apply to the ironmongers and plumbers, or the manufacturers, J. TYLOR and SON, Warwick-lane, London.

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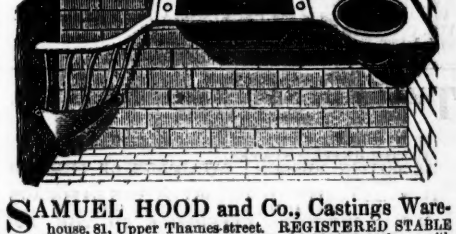
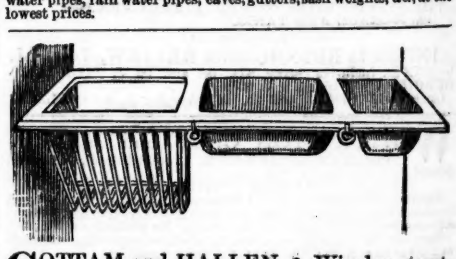
IRON PIPES for hot-water circulation, with Boilers, Fittings, and every connection, at wholesale prices. RAIN-WATER PIPES, eave and O G gutters, air bricks, sash weights, and railing bars; stable fittings, pumps, lamp columns, wrought-iron tubing and under-ground pipe of all sizes, and on the above terms, at LYNCH WHITE'S Iron Wharf, 66, Bankside, London.



SAMUEL HOOD and Co., Castings Ware- house, 81, Upper Thames-street. REGISTERED STABLE FITTINGS. Enamelled Mangers, with double hay-racks, or with enamelled water-cistern on one side.—Also, girders, columns, hot water pipes, rain water pipes, eaves, gutters, sash weights, &c., at the lowest prices.



COTTAM and HALLEN, 2, Winsley-street, Oxford-street, beg leave to draw attention to their new and improved patterns in STABLE FURNITURE. The manger, rack, and water-trough are placed in a line together, and may be had either plain, galvanized, or enamelled. Castings and wrought-iron work of every description, at the lowest scale of prices. Underground pipe, 8s. 9d. per cwt. Estimates upon application.
COTTAM and HALLEN, 2, Winsley-street, Oxford-st., London.

LEAD WORKS, HAMMERSMITH.— F. CLARK and SON, Lead, Glass, Oil, and Colour Merchants, beg to inform plumbers, builders, &c., that their present cash price for sheet-lead and pipe, delivered free to any part of London, is 18l. per ton. Ditto, ditto, in exchange, 2l. 10s. per ditto.

BUILDERS AND CONTRACTORS.

TARPAULINS for COVERING ROOFS during Repairs. SCAFFOLD CORD and every description of ROPE used by Builders upon the lowest terms. Marquees and temporary awnings on sale or hire. Orders per post receive the most prompt attention.—WILLIAM PIGGOTT, 115, Fore Street, City. Manufacturer, by Appointment, to Her Majesty's Honourable Board of Ordnance.

OXIDE of ZINC—SCOTT'S PATENT— an innoxious basis for all paints in lieu of white lead; equal to it in body, free from granulation. It may be applied with advantage to the manufacture of enamelled cards, paperhangings, glazed pottery ware, coach-panelling, and the bleaching of lace. &c. Sold by the patentee's agents, Messrs. GRAY and CO., 27, Commercial Chambers, Mincing-lane.—N.B. Paints and all articles covered with oxide of zinc are unchangeable in colour, brilliant in effect, harmless in application, economical in use.

A SUBSTITUTE for PAINT.—Cleanli- ness is necessarily at all times conducive to health, and this, as well as economy, is greatly promoted by substituting for the noxious process of painting with oil and white lead, STEPHENS'S DYES for STAINING WOOD, as a substitute for paint, for decorating churches, large public rooms, and theatres, as well as private dwellings. Every original invention, when becoming known and established, attracts a host of imitators, ready to seize upon and profit by another's ingenuity. So in the case of these Stains and Dyes, several imitators have sprung up; but the original inventor begs to assure the public that the time he has bestowed upon these articles to render them perfect ensures them against being disappointed in their use. His well-known experience in the preparation of colours enables him to effect the most perfect imitations of the various ornamental woods, while, at the same time, they reflect all the beauty of the natural grain.—The Dyes and Stains are prepared and sold by HENRY STEPHENS, 54, Stamford-street, Blackfriars-road, London, in bottles at 6d. and 1s. each, and 8s. per gallon.—The oak, mahogany, and satin-wood colours may be obtained in powder at 2s. per lb., which dissolves in water to form liquid, and 1 lb. will make one gallon of stain.—N.B. The trade supplied.—Sold at the Office of THE BUILDER, 2, York-street, Covent Garden, London; at both of which places may be had the proper varnish and size, with directions for its use.